

In The Driving Seat; A Coping Self-Regulation Training Program; A Pilot Study

Mercedes Taaffe

University of Tasmania, Hobart, Tasmania

Statement

I declare that this thesis is my own work and that, to the best of my knowledge and belief, it does not contain material from published sources without proper acknowledgement, nor does it contain material which has been accepted for the reward of any other higher degree or graduate diploma in any university.

Mercedes Laaffe

Acknowledgments

I wish to acknowledge and thank the following:

My supervisor Dr Jenn Scott, for her guidance, particularly in the early stages of this project

The participants of this study and their teachers without whom this study could not have been undertaken

The “go to” man at UTAS, Michael Quinn for all your help with stats and to classmates Louise King and Rebecca Urie and to Sue Jopling in the office

All my work colleagues at Top End Child and Adolescent Team, especially Cathy Lynch and Gail Bowker

My RT colleagues especially Judy Hatswell, Ali Sahebi, and Jim Pollock for taking the time to read my drafts and give me their feedback

Last, but most importantly thanks to my partner Coops, for your unending support, patience and good humor and for feeding me at regular intervals! Love you always.

Publications

Sweeney, C., Gaffney, B., Martin, A., Taaffe, M. (2006) *In The Driving Seat: Responsible Behavior - The Key to Happy Relationships*. Ireland. WGII.

Taaffe, M., & Scott, J. (2009). *In The Driving Seat*: Conference paper, William Glasser Institute of Australia bi-annual national conference Melbourne, Australia 2009.

Contents

List of Tables	8
List of Figures	8
List of Appendices	9
Literature Review	10
Abstract	11
Prevalence of Child and Adolescent Mental Health Problems	12
Treatment Focused Interventions	14
Prevention Focused Interventions	15
Protective factors	15
Adaptive resources	16
Is resilience an inherent characteristic or a dynamic skill?	17
Self-Determination Theory	19
Choice Theory/Reality Therapy	20
Resourceful adolescent program (RAP-A)	22
Optimistic thinking skills program	24
FRIENDS Program	25
The best of coping program (BOC)	25
Reality Therapy / Choice Theory	27
Empirical Support for Reality Therapy	29
Conclusion	33
References	35
Empirical Study	45

Abstract	46
School Based Programs	48
Aims of this Study	52
Method	53
Program Facilitator	53
Participants	53
Measures	54
The global self-worth subscale of self-perception profile for children (SPCC: Harter, 1985)	54
SPCC-teacher rating scale (Harter, 1985)	55
The motivation and engagement scale, junior-school (MES-JS; Martin, 2007)	55
The coping strategy indicator (CSI: Amirkhan, 1990)	56
Procedure	57
Intervention	58
Design	62
Results	62
Quantitative Results	62
Attrition	62
Harter self-perception profile for children (HSPC)	65
Harter self-perception profile (HSPC) teacher	65
Motivation and engagement scale (MES) child	65
Coping strategy indicator (CSI) child	67
Miscellaneous Analyses	67

ANCOVAs	67
Power	67
Qualitative Results	67
Discussion	74
Test the Intervention effect on children's self-esteem, academic motivation and coping ability	74
Identification of Specific Skills Participants Found Useful	79
Add to the research data on Reality Therapy / Choice Theory	83
Recommendations for Delivery of the <i>In The Driving Seat</i> Program	86
Recommendations for Future Research	87
References	92
Appendices	99

List of Tables

Table 1	Means and standard deviations of intervention and control group at pre-test with additional normative reference, group means and standard deviations for measures used.	64
----------------	---	----

List of Figures

Figure 1	What part of the program worked best for you?	68
Figure 2	How and why was the program helpful to you?	69
Figure 3	How would you describe this program to someone who has never done it?	70
Figure 4	Is there anything in this program you would change?	71
Figure 5	What have you learned about making choices?	72
Figure 6	What caring habits worked best for you?	73

List of Appendices

A	Choice Theory Concepts	99
B	Choice Theory Axioms	101
C	Information Sheets (Parent/Teacher/Principal)	102
D	Consent Forms (Parent/Child/Teacher/Principal)	108
E	Quantitative Measures	114
F	Participants Qualitative Evaluation Questionnaire	125
G	<i>In The Driving Seat</i> Behavioral Intervention Program	126

Literature Review

A Pilot Study Evaluation of a Coping Self-Regulation Training Program (“*In The Driving Seat*”) to Increase Psychologically Protective Factors in Primary School Aged Children.

Abstract

The “In The Driving Seat” (ITDS) program is a coping self-regulation program designed to increase psychologically protective factors in children and adolescents. This review highlights the theoretical and research based foundations of the development and pilot testing of the *ITDS* program. The prevalence of mental health issues for adolescents is discussed with a brief review of current treatment focused interventions. Furthermore, preventative factors associated with resilience and coping are examined, including a consideration of both biological and environmental factors. The benefits of a universal approach to program delivery are highlighted and a summary of currently available school based preventative programs in Australia is provided. Finally, the rationale for pilot testing this unique coping and resilience training program with school aged children is presented.

Research highlights that adolescence, defined by the World Health Organisation as between the ages of ten years and nineteen years, is a particularly difficult stage of development that generates many challenges and tasks. Key aspects contributing to this notion include conflict with parents, mood disruptions and risky behaviors (Arnett, 1999). Perkins (1997) identifies a number of developmental tasks for adolescents. These include developing mature relationships with peers, developing an ideology of what is acceptable or not acceptable behavior, and being socially responsible. They also include having an acceptable body image/physique, successful transition through school and achieving emotional independence from parents and peers. Consistent with the body of work first described by Erikson (1950), Masten and Coatsworth (1998) refer to the creation of a stable and cohesive sense of self identity as the key task for adolescents.

Failure to meet developmental expectations contributes to an increased incidence of emotional, social and cognitive difficulties in adolescence (Beyond Blue, 2009). Furthermore it has been found these difficulties in psychological functioning result in depression (Cunningham & Walker, 1999), substance abuse (Galaif, Sussman, Chou & Wills, 2003), academic underachievement (Martin, 2008), violent conduct (Kellam, Ling, Merisca, Brown & Ialongo, 1998) and diminished life satisfaction (Mcknight, Huebner & Suldo, 2002).

Prevalence of Child and Adolescent Mental Health Problems

The need for programs to reduce the development of mental health problems in young people is evidenced by the prevalence of these conditions across the globe. Many

studies have examined the prevalence of mental health problems experienced by children and adolescents. In Queensland Connell, Irvine and Rodney (1982) surveyed 986 children aged 10-11 years and reported an overall prevalence of psychiatric disorders of 14%, with children living in rural areas found to have a lower percentage of disorders than children living in urban areas. Similarly, Sawyer, Sarris, Baghurst, Cornish and Kalucy (1990) surveyed 528 children aged 10-11 years or 14-15 years living in metropolitan Adelaide using the Child Behavior Checklist (Achenbach, 1991). They reported that 21% of children in the younger group and 15% of the older group scored above the recommended cut-off score on the list, indicating clinical symptomology. One of the most comprehensive studies undertaken in Australia, The Western Australia Child Health Study (Zubric et al., 1995) found that six percent of children aged 4-14 years surveyed, had a mental health problem.

A more recent study by Kessler, Bergland, Demler, Jin and Walters (2005) showed that 75% of people in the USA with a mental disorder had an age of onset younger than 24 years of age. Sawyer, Baghurst and Clark in the 2000 Australian National Survey of Mental Health and Wellbeing, reported that a minimum of 14% of adolescents below the age of 18 years were diagnosable with a substance use or mental disorder in a 12 month period. The figure for the 18-24 year age group was 27%. The need for prevention focused interventions among adolescents to develop coping strategies to deal with developmental challenges before they emerge as mental health disorders is evident (Costello, Mustillo, Erkanli, Keeler & Angold, 2003; Boys, Farrell & Taylor, 2003; Maughan, Collishaw, Meltzer & Goodman, 2008).

Treatment Focused Interventions

Over the past decade there has been a considerable increase in the number of randomised controlled trials (RCTs) of treatment focused interventions targeting problematic adjustment in children and adolescents (Silverman & Hinshaw, 2008). These include phobic and anxiety disorders (Silverman, Pina & Viswesvaren, 2008), depression (David-Ferdon & Kaslow, 2008), and disruptive behaviours (Eyberg, Nelson & Boggs, 2008). Findings from Silverman and Henshaw (2008) suggest that both individual and group based Cognitive Behavioral Therapy (CBT), with or without parental involvement, are probably efficacious for the treatment of anxiety disorders such as social phobia. In regard to the treatment of child and adolescent depression, CBT was again found to be efficacious for depressed children, or children at risk of depression. For adolescents meeting criteria for depression (David-Ferdon & Kaslow, 2008), or with some depressive symptoms, both CBT and Interpersonal Psychological Therapy (IPT) were found to be successful. Finally, for treatment of disruptive behaviours, such as oppositional defiance and conduct disorder, 16 evidence-based treatments have recently been identified (Eyberg et al., 2008). These interventions involve a range of treatment components, including anger control training, group assertion training, positive parenting, community-based alternatives to institutionalization, multi-system therapy (that involves both intensive family and community based intervention), parent management techniques, parent-child interaction therapy, positive parenting, and problem solving skills training (Eyberg et al., 2008).

Prevention Focused Interventions

Many child and adolescent interventions focus on treatment of psychopathology, or mood disturbance. Few interventions have taken a prevention focus, and incorporated treatment components that aim to enhance those psychologically protective or resilience related factors that predict good social and academic adjustment in children, and improved transition to adolescence and adulthood (Masten et al., 2004). Successful preventative programs must identify and incorporate the components that mediate prevention of mental illness.

Protective factors.

When discussing prevention focused interventions a key factor is the promotion of protective factors. Protective factors refer to anything within and outside an individual that prevents or reduces risk and enhances the attainment of appropriate outcomes (Frazer & Galinsky, 1997). A number of protective factors have been identified in child-based research. Garmezy (1985) concluded that three broad sets of variables operated as protective factors 1) personality features, such as self-esteem 2) family cohesion and an absence of discord; and 3) the availability of external support systems that encourage and reinforce a child's coping efforts.

Werner (1977), Masten, (2001) and Luthar and Zelazo (2003), all identify supportive and responsive parenting as a significant protective factor. Weinfield, Sroufe and Egeland (2000) stated that if responsive parenting is absent early attachments are insecure in nature; at-risk children tend to anticipate negative reactions from others and

can eventually come to elicit these. These experiences of rejection further increase feelings of insecurity. Living in poverty can be a vulnerability factor particularly for boys as they are typically more reactive than girls to negative community influences (Luthar & Zigler, 1999). According to Masten (2001) children with a low IQ who face life adversity are more vulnerable to adjustment difficulties whereas having protective factors such as an internal locus of control (a feeling that one is in control of their own destiny rather than by luck or chance) and feelings of self efficacy are linked with positive outcomes (Masten, 2001; Rutter, 1999; Luthar & Zigler, 1999). Protective factors are both intrinsic and extrinsic to the child and work in combination with adaptive resources in mediating the components that aid prevention of mental illness. A successful prevention program should therefore include elements that aid self-esteem, develop an internal control psychology and incorporate elements that develop positive external relationships with school and family.

Adaptive resources.

Adaptive resources refer to the resources young people have available to mitigate the development of mental health problems in the transition from childhood to adulthood. In a large-scale longitudinal study (Masten et al., 2004), 173 students were followed over a 20 year period, from childhood to adulthood. The adaptive resources that were found to predict better transitions included autonomy, coping skills, ability to plan and future motivation.

Other researchers found that external social-environmental factors play a key role in enhanced adjustment. For example, Losel, Bender and Bliesener (1992) found

that high levels of coping self-efficacy and connection with their educational environment were important adaptive protective factors for good mental health. They stated that resilient adolescents are more likely to perceive themselves as less helpless, have a flexible temperament, are active problem solvers, have a more realistic view of the future, have higher IQs and have positive self concepts.

This research further supports that successful intervention programs should have components that focus on helping participants increase their autonomy (i.e. help them to become aware that they have control over the choices they make in their lives), increase their coping skills by teaching positive ways to deal with problems and teach the importance of effective communication to develop and maintain positive relationships. A successful intervention program should also incorporate external factors such as parenting and school environment. In summary, a child's 'resilience' to factors that might otherwise undermine their mental well-being is determined by the combination of both the presence of protective factors and adaptive resources (Rutter, 1989). The research outlined above highlights that the presence of protective factors and adaptive resources correlates with better mental health in the adolescent population. To identify the benefits of including such factors in preventative programs the following question must be asked.

Is resilience an inherent characteristic or a dynamic skill?

Investigators into the conceptualization and research of resilience must address whether self-esteem, motivation and coping ability can be taught i.e. are they competencies we are born with, or can they be nurtured? Researchers have theorized

that whilst nature is important, it is the interplay between the biological and the environmental that predicts an individual's resilience levels, and therefore, risk levels. Kim-Cohen, Moffit, Caspi and Taylor (2004) examined both genetic and environmental processes within the resilience framework. Using 1,116 twin pairs from low socio-economical backgrounds, they examined two aspects of resilience, behavioral and cognitive. They reported that additive genetic effects accounted for approximately 70% of the variation in children's behavioral resilience and 40% of the variation in cognitive resilience. The primary protective factors highlighted were maternal warmth and participants outgoing temperament, with each factor mediated by both genetic and environmental effects. Kim-Cohen et al., (2004) note that environmental effects can make a positive difference and that even child temperament promoted resilience through environmental processes. They conclude that life stresses can be mediated by warm, supportive parenting and a stimulating learning environment and children can be helped to achieve greater behavioral and cognitive resilience. This supports the implementation of preventative mental health literacy programs.

Further supporting the interplay between nature and nurture is the research by Koenen, Moffitt and Caspi (2003). They highlighted that even after controlling for genetic factors, exposure to domestic violence accounted for significant variations in children's IQ. Is it possible that exposure to positive environmental factors can override less favorable genetic factors just as exposure to a negative environment can have the opposite effect? Individual factors relating to resilience in children and adolescents must be considered in relation to the environments in which they are exposed to. If a child is exposed to an environment that teaches skills that develop autonomy, positive

coping strategies and ways to build better relationships with others, does it follow that there will be an improvement in their mental wellbeing? These questions provide the focus for this pilot study which explores these issues.

Research supports that resilience factors are a result of the interplay between nature and nurture suggesting that both have a major role in the determination of a young person's ability to deal with issues that can result in mental health problems. Some of the theories purporting the importance of genetic factors or "innate needs" are outlined below.

Self-Determination Theory

Self-Determination Theory (SDT; Ryan & Deci, 2000) highlights the importance of our innate resources in personality development and regulation of our behavior. SDT focuses on the investigation of people's inherent tendencies and innate psychological needs, as the basis for their self-motivation and personality integration. Using empirical processes i.e. a progression of observed facts and data, Ryan and Deci (2000) identified three basic needs that are essential for facilitating optimal functioning for growth and integration, social development and personal well-being; 1) Competence i.e. an ability to perform some task or accomplish something (also identified by Harter, 1978). 2) Relatedness i.e. a relationship with others (also identified by Baumeister & Leary, 1995; Reis, 1994) and 3) Autonomy i.e. independence (also identified by DeCharms, 1968; Deci, 1975). Ryan and Deci believe that meeting these innate needs is necessary for optimal personality development and behavioral self-regulation. These are essential components of mental wellbeing.

Choice Theory/Reality Therapy

Choice theory (1998) founded by William Glasser (formally known as Control Theory, 1984) also supports the role of “innate” or “basic” needs in the regulation of human behavior. Glasser suggests that almost all human behavior is chosen to satisfy the five basic needs of Love and Belonging, Fun, Freedom, Power and Survival. In his book *“Choice theory: A new psychology of personal freedom”* (1998) Glasser contends that these five basic needs are written into our genetic structure and they drive all our behaviors from birth to death. Unfortunately, according to Glasser, our genes do not provide us with any specific behavior to meet these needs so shortly after birth we start to learn how to behave in order to get our needs met and we continue learning new and refined ways to behave to meet our needs for the rest of our lives.

Few empirical studies have provided biological evidence in support of the contention that these needs are biological. However, the recent discovery of distinctive emotional command neural pathways by Panksepp (1998) may lend some support to Glasser’s claims (1998). Panksepp found that there are at least seven specific systems in the brains of all mammals that coordinate the emotional, behavioral and physical responses needed for functions related to survival, such as rest, dominance, belonging and procreation. In the future, neuropsychological investigation may elucidate further whether there is a biological basis to the components of Glasser’s theory however the recognition of these innate needs is a key component of Reality Therapy (the application of Choice Theory).

Reality Therapy/Choice Theory (RT/CT) has not been investigated with the same scientific rigor as Self-Determination Theory. This pilot study aims to add to the research data on RT. However RT does generate practical strategies to both identify basic needs and functionally satisfy them. According to Glasser (1998), all behavior is 'need' fulfilling, and if the 'need' can be fulfilled in some other way then the behavior will change. This is supported by the premise of Functional Behavioural Analysis (Baer & Wolf, 1987), where the 'function' of behavior provides hypotheses about the relationships between specific environmental events and behaviors. For example, if a child is meeting a 'need' via maladaptive strategies, can they be taught to meet their 'need' via adaptive strategies? This pilot research will explore this possibility.

Other theorists also expound the importance of innate human needs in determining behavior. Albert Ellis, the founder of Rational Emotive Behavior Therapy (REBT; Ellis, 1957), agreed with Glasser (1998) and Ryan and Deci (2000), that as humans we have intrinsic wants and needs. Luthar and Prince (2003) refer to the 'desire to belong' as a basic human need. They state that having positive connections with others is at the very core of psychological development and that strong, supportive relationships are critical for achieving and sustaining resilient adaptation.

Up to now this literature review has highlighted the prevalence of mental illness in adolescents, the treatment focused interventions currently used and the protective/adaptive factors that can prevent the development of mental illness. It has been established that an affective preventative intervention program needs to incorporate these protective factors / adaptive resources and recognize the role of innate needs in the

regulation of behavior. It has been argued that concentrating prevention programs only on high-risk individuals is ineffective, and that programs reducing overall risk in whole populations are urgently needed (Rosenman, 1998). Universal programs are programs aimed at an entire population rather than one defined by a specific diagnosis or label. Universal programs, while often expensive to mount and difficult to implement, overcome the labeling difficulties and low participation and retention rates associated with selective programs. Recruitment for selective programs may be identified by the adolescent as been singled out from their peers at an age when peer acceptance is particularly important (Shochet et al., 2001). Furthermore, universal programs move away from the deficit model, (where the focus is on risk factors) that has been traditionally adopted by schools in the identification and management of students at risk. Focusing on positive relationships rather than specific risk factors can have a more profound impact on the direction that individual lives take (Werner & Smith, 1988). Intervention programs implemented as part of a standardized school curriculum can overcome this difficulty. There are several examples of school based universal mental health literacy programs. The following reviews some of the universal preventative programs currently been delivered in Australia.

Resourceful adolescent program (RAP-A).

The RAP- A program (Shochet, Holland & Whitefield, 1997) was developed to meet the promotion of mental health literacy in a school-based format. It focuses specifically on the prevention of adolescent depression. It comprises an 11-session program conducted weekly for between 40 and 50 minutes during school class time.

Session content includes building rapport, affirming existing strengths, self-management skills, cognitive restructuring, problem solving, accessing support networks, family harmony and conflict avoidance and perspective taking. Piloting the program resulted in significantly lower rates of clinical and sub clinical depression and higher rates of participants in the healthy range than those in the control group. This was maintained at follow-up ten months later.

Shochet's 2001 study was significant in that it answered a number of important questions in relation to the effectiveness of universal intervention programs, though it was specific in its focus on depression prevention in a sub-clinical symptom cohort of youngsters. Attrition remained low throughout the study (5.8% from pre to post intervention and a 19.8% attrition rate from pre intervention to follow-up), and the standardization of program delivery was high across groups (89.3% session accuracy rate). This indicates that the results of the study have some reliability and the constraints of a school setting can be overcome.

Those with moderately elevated symptoms in the RAP-A program were more likely to fall in the healthy range and less likely to fall in the clinical range compared to the control group. Significantly, none of the RAP-A participants in the sub-clinical range had moved into the clinical range at post-test five months later or at ten month follow-up. The results of the program indicated benefit to adolescents who were considered healthy on entry to the study. Of the control group, 10.1% of healthy participants moved into sub-clinical ranges at follow-up, while none from the RAP-A program showed an elevation in symptoms. This demonstrates that a universal program

can target all categories without the necessity of identifying specific ‘disordered’ populations. From a prevention perspective, the success of the program with a healthy population is particularly encouraging however no follow-up post ten months has been reported so the long term effects of intervention are not known.

Optimistic thinking skills program (Bright Ideas)

A study by Cunningham, Brandon and Frydenberg (2002) examined the effectiveness of teaching optimistic thinking skills to increase coping resources in a group of fifth and sixth grade students. The idea of teaching young people the skills of optimistic thinking is based on research that reflects the potential benefits of developing a more positive thinking approach. Compas and Hammen (1994) highlighted that young people who think pessimistically find it more difficult to cope effectively with negative or challenging situations. This program is directly based on Seligmans’ (1995) approach to building optimism in young people through using the principles of Cognitive Behavioral Therapy (CBT). Fundamental components of the program include listening to ones self-talk, connecting thoughts to feelings evaluating the accuracy of thoughts and challenging catastrophic thinking.

Post-test responses show that children who participated in the program reported significant improvements in coping efficacy and a reduction in depressive attributions and use of non-productive coping strategies when compared with controls. These results support the feasibility of implementing programs in school settings that address the emotional health of all young people however a consistent application of such a program with follow-up assessment is necessary to ascertain the longer term benefits.

FRIENDS program.

The FRIENDS program (Barrett, Farrell, Ollendick & Dadds, 2006) is another universal Cognitive Behavioral intervention program currently been delivered in Australian schools. It is a 10-session program aimed at reducing anxiety among adolescents in the 10-12 age groups and the 15-16 age groups. The program teaches participants skills to identify their anxious feelings, how to reduce their anxiety by replacing anxious thoughts with more helpful ones and how to overcome problems and challenges they face in daily life. It has been found to be effective in reducing anxiety and depression (Barrett et al., 2006) but once again the longer term benefits of this program have not been measured.

The Best of Coping program (BOC).

The BOC program (Frydenberg & Brandon, 2002) integrates Cognitive Behavioral skills that enhance optimistic thinking, effective communication, adaptive problem solving, decision making and goal setting in the course of 10 one hour weekly sessions. Evaluation of the program indicated a decrease in non-productive coping in “at risk” groups and an increase in productive coping in “resilient” groups (Frydenberg & Brandon, 2002). While indications are that this program has beneficial effects long term empirical analyses has not been completed.

A number of Australian universal prevention or early intervention programs have been empirically supported, however meta-analytic appraisal has suggested the overall quality of studies were low (Neil & Christensen, 2007). The programs with the strongest evidence for effectiveness, according to Neil and Christensen (2007), were the

FRIENDS program (Barrett, Farrell, Ollendick & Dadds, 2006) and the Resourceful Adolescent Program (RAP; Shochet, Holland & Whitefield, 1997). Groundwater-Smith (2000) in a paper presented to the annual conference of Australian Associations for Research in Education, expounded the importance of evidence based practice in improving school systems. The difficulty she reported is in the application of practitioner research into school culture. Dryden (1995) highlighted that significant school reform is needed to promote the factors that have been shown to predict resilience in student populations. Adapting both research practice and application of interventions will necessitate a whole school approach. Such programs will need to be “embedded into the schools corporate being” (Goodwin & Groundwater-Smith, 2000, p.1). If this happens it will enable a more empirical based approach with longer term follow-up into the effectiveness of preventative programs.

The Mental Health Promotion and Prevention National Action Plan (MHPPNAP; SchoolMatters, 1999) is a Commonwealth initiative that attempts to incorporate evidence based practice into a whole school approach to increasing mental wellbeing in secondary school students. It provides schools with a framework and planning tools to assist them with possible structures, strategies, partnerships and curriculum programs to promote and protect the mental health of all members of the school community. It recognizes the potential pivotal role schools can play in mental wellbeing. Materials have been developed based on research outlined above that highlights the importance of resilience and protective factors such as self-esteem, autonomy, problem solving, communication skills and the need to belong. The recognition of the role of school-level systems and its powerful impact on the long-term

resilience of young children is not a new concept. Edmonds (1982; Programs of School Improvement, p. 15) describes school as an environment that is so potent it can override almost everything else in the lives of children, including teachers, class, family or neighborhood, for at least 6 hours per day. Glasser (1992) in his book "*The quality school: Managing students without coercion*" also recognized the powerful role schools have to play in the happiness of young people. Glasser advocates that traditional coercive management in schools is not contributory to mental wellbeing. He suggests replacing the "bossing" that turns students and staff into adversaries with a system of management that brings them together. He recommends a change of focus from achieving high scores on assessment tests to teaching in a way that satisfies students' needs. Glasser purports that by helping students meet their needs discipline problems will disappear and students will find satisfaction in doing well in school and thus be happier. To work this would require a whole school approach much as the Mental Health Promotion and Prevention National Action Plan (1999) advocates.

This research pilots a program called "*In The Driving Seat*" (Sweeney, Gaffney, Moran & Taaffe, 2006) which was developed using Glassers' Reality Therapy/ Choice Theory framework (RT/CT).

Reality Therapy/ Choice Theory (RT/CT)

Choice Theory (Glasser, 1998) formerly known as Control Theory (Glasser, 1984), changed its name due to the potential interpretation that his theory advocated (controlling others), is an innovative form of psychotherapy that purports to help people live happier and more effective lives. It is based on a system of human brain

functioning known as Choice Theory (CT) that explains “Why” and “How” we behave and the importance of accepting personal responsibility for the behaviors we choose. Choice Theory examines human’s basic needs, wants and the four components of ‘Total’ behavior i.e. Thinking, Acting, Feeling, and Physiology, and provides fuel for the development of new treatment/preventative approaches. The application of Choice Theory (CT) is called Reality Therapy (RT).

The basic concepts underlying CT/RT have moved away from the traditional Cognitive Behavioral Therapy emphasis on changing or correcting one’s thoughts in order to overcome suffering. RT aims to help the person examine his or her “Wants” (Quality World) and “Doings” (actions) and by utilizing a self-evaluation process, alter the direction of his or her “Thinking” and “Doing” so they can live happier lives. In other words RT aims to change our relationship with our “Wants” and our “Doings” so we can become free from ineffective actions and free from the patterns that bind us and prevent us from living a flexible, meaningful and enjoyable life. In the service of these aims RT incorporates cognitive challenge, paradoxical techniques and a wide range of behavioral approaches already known to be effective from CBT.

As with CBT, RT teaches people to evaluate their thoughts, beliefs and values and their effectiveness in their lives. However, the main focus of RT interventions is to teach people to change their ACTIONS. RT contends that we do have a huge amount of control over our actions and it is through our action (doing) that we create a happy and meaningful life. To quote Dr Ali Sahebi (personal communication, Jan 23rd 2010), “We

can act our way to a new way of thinking quicker than we can think our way to a new way of acting”.

Empirical Support for Reality Therapy

Although some research on RT is published in the *Journal of Reality Therapy*, and over 90 doctoral dissertations are related to RT, the amount of randomized control studies using RT is limited. One of the aims of the current research is to add to the research data on RT. Some of the studies supporting the use of Reality Therapy are outlined below.

A study by Passaro, Moon, Wiest and Wong (2004) based on Reality Therapy and using case study analyses involving 10 students with behavior problems, produced tentative evidence that an intervention focusing on self-regulation of behavior, including self-motivation or self-agency skills for attaining personal goals, and problem-solving skills, can enhance cognitive, behavioral and academic outcomes in students. However, the study did not involve control comparisons, and its' generalisability to children without a behavioral problem is untested.

Other Reality Therapy based studies reported in *The Journal of Reality Therapy* aimed to intervene in a range of issues including depression (Ingram & Hinkle, 1990), domestic violence (Rachor, 1995), sex offender education (Henry & Cashwell, 1998), and family therapy (Mickel & Liddie-Hamilton, 2002).

Radtke, Sapp and Farrell (1997) examined quantitatively the effectiveness of Reality Therapy across several empirical studies, and it found that Reality Therapy has

many applications, especially school-based ones. They quantitatively summarized 21 studies, using effect-size measures and found a practical significant measure of Reality Therapy (medium effect size). However, this was not statistically significant due to the small sample size. Despite several limitations RT had an average effect size within the medium range. This indicates that a statistically significant effect for RT may occur when more quantitative studies are performed.

RT programs are widely used in schools. The ideas expressed by Glasser in his book "*The quality school*" (Glasser, 1990), were first introduced on a school wide basis at the Apollo school, California, USA with at-risk students. In a later publication, "*The quality school; managing students without coercion*" (1992), Glasser recounted research by the Apollo school principal Brad Greene (1991). He highlighted that over a three year period attendance improved by 78%, weekly drug usage dropped by 60% and students on probation dropped by 27%.

Another collaborative whole school approach using Reality Therapy reported by Bratter, Bratter, Maxym, Radda and Steiner in 1993 was the John Dewey Academy: Great Barrington, Massachusetts, USA. The John Dewey Academy as described by Bratter et al. (1993) was a residential school for alienated and angry adolescents. Before admission 33% of students had been hospitalized for at least 2 months, 66% had been treated by psychiatrists and 66% were addicted to drugs. The school approach to education involved giving students personal choice and the opportunity and responsibility to take control of their behavior both in the residence and in school. A study of 313 students showed that 28% graduated and 75% of those who graduated

received permission from their parents to return home. Bratter et al., (1993) attributed the success of The John Dewey Academy to the challenging therapeutic but nurturing orientation of the school. Students learn the importance of problem solving and making better choices as pathways to effective living.

Another school based study cited in Wubboldings' *"Reality therapy for the 21st century"* (p. 227), highlighting the potential benefits of a Reality Therapy approach was The Benjamin Franklin High School study (Swenson, 1995; USA). Attitudes of Benjamin Franklin high school students were compared with a random sample of students selected from three other home schools in the district. The groups were statistically comparable in relation to measures of security, social, self esteem and self-actualization needs. The Benjamin Franklin high school practiced the Quality School Model (i.e. a whole school approach using Reality Therapy concepts). Significantly greater emphasis was perceived by Franklin students and faculty on quality work than on controls and significantly more Franklin parents reported teachers emphasizing quality work and encouragement of high aspirations. Franklin students viewed their teachers as non-coercive managers who encouraged them to take responsibility for their education. Franklin students also disagreed that it was a teacher's job to evaluate the quality of a students work, insure students were not angry or bored or make students behave. This research highlights the potential impact of environments where Glasser-orientated interventions occur on a consistent basis. Such a consistent intervention has the capacity to redefine and clarify teacher-student relationships, remove the power struggle and allow all interactions in the educational setting to teach responsible behavior.

King (1999) in an unpublished manuscript cited in Wubboldings' "*Reality Therapy for the 21st Century*" (p. 229) investigated the value of involving both parents and teachers in the reform of the science curriculum of a middle school in the USA that used the Quality School model, in order that they could collaboratively improve and support it. The school realized that their whole school model had neglected to include parents in their quest for continuous school improvement. Using questionnaires and focus groups an action plan was developed to improve the curriculum and meet parent's needs. Follow-up interviews indicated that parental attitudes to both the science program and parental involvement in curriculum development improved dramatically. The study supported the Reality Therapy/Quality school contention that human needs drive all human behaviors. Parents and teachers shared responsibility and collaborated successfully to enhance the science program.

The above studies while supporting the use of a Quality School model, serve to further highlight the infancy of this model in an empirical setting. This pilot study hopes to add to the research data currently available on Reality Therapy based interventions. Quality Schools programs are currently been used across the USA, Europe and Ireland. Many teachers working in the Australian education system have also trained in RT and use it in their work. Furthermore, Choice Theory/Reality Therapy has recently been acknowledged by the Australian Psychological Society of Australia as evidence based intervention therapy (A. Sahebi, personal communication, January 23, 2010). Compared to Cognitive Behavioral Therapy, Reality Therapy is very much in its infancy in terms of empirical support but research is developing and with an increasing evidence base will no doubt be more widely employed. This pilot study aims

to add to this research knowledge and add support for its incorporation in a school's curriculum to aid in the prevention of mental illness among adolescents. This current study is the first to examine the effectiveness of the program. It is therefore necessary to pilot the program as it will inform levels of engagement and satisfaction as well as its effectiveness in a field setting. It adds to existing data on Reality Therapy and examines the practical application of the program in the school setting.

Conclusion

This literature review highlights that preventative universal school based programs have the potential to play an important role in the prevention of mental health problems for young people in their transition to adulthood. An effective preventative program acknowledges the role of innate needs in the regulation of human behavior. It recognizes the importance of enhancing protective mechanisms and adaptive resources such as increased autonomy, coping skills and relationships with others. Ideally it should also enhance environmental factors such as a caring school environment and supportive and responsive parenting. The Comprehensive Training to Assure Resiliency in Students project (1996) concluded that the more protective factors that are present in a child's life the more likely they are to display resilience. In the empirical study to follow we report upon a pilot study that aimed to incorporate these identified criteria in delivering a school based intervention aimed at improving the mental wellbeing of participants.

A Reality Therapy/Choice Theory (RT/CT) school-based prevention intervention program called "*In The Driving Seat*" (ITDS; Sweeney, Gaffney, Martin, &

Taaffe, 2006) was piloted with a small sample of Australian primary school children. Components of the “*In The Driving Seat*” program are based on Choice Theory/Reality Therapy. *ITDS* is a school based prevention program that helps participants to identify specific wants related to their generic needs, evaluate their behavior and plan to meet their needs. It teaches participants that identifying the need they are trying to satisfy with a specific behavior i.e. the purpose of their behavior, may be met more effectively using alternate behaviors.

It uses visual imagery (the ‘Behavior Car’) to teach children the components of behavior i.e. ‘Total Behavior’ (acting, thinking, feeling & physiology). It examines the pictures children have of all the people, values, places and things that are most important to them (‘Quality World’) that satisfies their needs. *ITDS* also introduces components on perception, positive self-talk and “connecting” and “disconnecting” behaviors.

This program “*In The Driving Seat*” was hypothesized to assist in the development of protective mechanisms in children. It was specifically designed to be a universally delivered program to children who had not been identified as having a pre-existing mental health conditions. The recommended application of preventative programs is the integration of these programs into the school curriculum (Rosenman, 1998; Shochet et al., 2001). The widespread implementation of such programs in schools in Australia, despite the lack of empirical randomized control trials for their effect, suggests they have merit.

References

- Achenbach, T. M. (1991). Manual for child behavior checklist / 4-18 and 1991 profile. Burlington, VT : University of Vermont, Dept. of Psychology
- Arnett, J. (1999). Adolescent storm and stress, reconsidered. *American Psychologist*, 54, 317-326.
- Baer, D., Wolf, M., & Risley, T. (1987). Some still-current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, 20, 313.
- Barrett, P. M., Farrell, L. J., Ollendick, T. H., & Dadds, M. (2006). Long-term outcomes of an Australian universal prevention trial of anxiety and depression symptoms in children and youth; an evaluation of the FRIENDS program. *Journal of Clinical Child Adolescent Psychology*, 35, 403-411.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-497.
- Berk, L. E. (2000). *Child development* (5th ed.). Needham Heights, Ma : Allyn and Bacon.
- Beyondblue. (2009). *The National Depression Initiative, submission to parliament of victoria inquiry into the potential for developing opportunities for schools to become a focus for promoting healthy community living*. Retrieved April 17, 2010, from beyondblue.org.au/index.aspx?link_id=2.574.
- Boys, Farrell, M., & Taylor, C. (2003). Psychiatric morbidity and substance use in young people aged 13-15 years; results from the child and adolescent survey of mental health. *British Journal of Psychiatry*, 18, 509-17.

- Bratter, B., Bratter, T., Maxym, C., Radda, H., & Steiner, K. (1993). The John Dewey Academy: A residential, quality school for self-destructive adolescents who have superior intellectual and intuitive potential. *Journal of Reality Therapy, 12*, 42-42.
- Cole, D., & Turner, J. (1993). Models of cognitive mediation and moderation in child depression. *Journal of Abnormal Psychology, 102*, 271-281.
- Comprehensive Training to Assure Resiliency in Students (1996) *Moving Beyond Risk to Resiliency; The schools role in supporting resiliency in children*. Minneapolis Public Schools - CTARS Project.
- Connell, H., Irvine, L., & Rodney, J. (1982). The prevalence of psychiatric disorder in rural school children. *Australian and New Zealand Journal of Psychiatry, 16*, 43-46.
- Costello, E.J., Mustillo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of disorders in childhood and adolescence. *Archives of General Psychiatry, 60*, 837-44.
- Cunningham, E., Brandon, C., & Frydenberg, E. (2002). Enhancing coping resources in early adolescence through a school-based program teaching optimistic thinking skills. *Anxiety, Stress & Coping, 15*, 369-381.
- Cunningham, E., & Walker, G. (1999). Screening for at-risk youth: Predicting adolescent depression from coping styles. *Australian Journal of Guidance and Counselling, 9*, 37-47.

- David-Ferdon, C., & Kaslow, N. (2008). Evidence-based psychosocial treatments for child and adolescent depression. *Journal of Clinical Child & Adolescent Psychology, 37*, 62-104.
- DeCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*: Academic Press.
- Deci, E. (1975). *Intrinsic motivation*: Plenum Press New York.
- Dryden, J. (1995) *The Quality Schools Initiative: Analyses of an educational reform as perceived by principals in K-12 consortium schools*. Doctoral dissertation (Ann Arbor, MI: UMI).
- Edmonds, R. (1982) Programs of school improvement: an overview, *Educational Leadership, 40*, 4-11.
- Ellis, A. (1999, Feb). *Rational emotive behavior therapy as an internal control psychology*: Paper presented at the national conference on Internal Control Psychology: Albert Ellis Institute, New York City.
- Eyberg, S., Nelson, M., & Boggs, S. (2008). Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology, 37*, 215-237.
- Fergusson, D., & Lynskey, M. (1996). Adolescent resiliency to family adversity. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 37*, 281-292.
- Frazer, M. W., & Galinsky, M. J. (1997). Toward resilience based model of practise. In M. W. Frazer (Ed.), *Risk and resilience in childhood: An ecological perspective*, 265-275. Washington, DC: NASW Press.

- Frydenberg, E., & Brandon, C. (2002). *The best of coping: developing coping skills for adolescence instructor's manual*. South Melbourne: Oz Child.
- Galaif, E., Sussman, S., Chou, C. P., & Wills, T. (2003). Longitudinal relations among depression, stress and coping in high risk youth. *Journal of Youth and Adolescence*, 32, 243-258.
- Garmezy, N. (1985). Stress-resistant children: The search for protective factors. *Recent Research in Developmental Psychopathology*, 4, 213-233.
- Glasser, W. (1984). *Control theory: a new explanation of how we control our lives*. New York, NY: Harper & Row.
- Glasser, W. (1990). *The quality school*. New York: Harper Collins.
- Glasser, W. (1992). *The quality school: Managing students without coercion*: Harper and Row Publishers, Inc., 10 East 53rd Street, New York, NY 10022.
- Glasser, W. (1998). *Choice theory: A new psychology of personal freedom*: Harper Collins.
- Goodwin, N. & Groundwater-Smith, S. (2000, September). *Beyond the individual; corporate professional learning in schools*. Paper presented to the 3rd International Practitioner Research conference University of Innsbruck.
- Harter, S. (1978). Effectance motivation reconsidered toward a developmental model. *Human Development*, 21, 34-64.
- Henry, C., & Cashwell, C. (1998). Using reality therapy in the treatment of adolescent sex offenders. *International Journal of Reality Therapy*, 18, 8-11.
- Ingram, J., & Hinkle, S. (1990). Reality therapy and the scientist-practitioner approach: A case study. *Journal of Reality Therapy*, 9, 53-59.

- Kellam, S. G., Ling, X., Merisca, R., Brown, C. H., & Ialongo, N. (1998). The effect of level of aggression in the first grade on the course and the malleability of aggressive behavior into middle school. *Development and Psychopathology*, 10, 165-185.
- Kessler, R., Bergland, P., Demler, O., Jin, R., & Walters, E.E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62, 593-602.
- Kim-Cohen, J., Moffitt, T., Caspi, A., & Taylor, A. (2004). Genetic and environmental processes in young children's resilience and vulnerability to socioeconomic deprivation. *Child Development*, 75, 651-668.
- Koenen K. C., Moffitt T. E., & Caspi A. (2003). Domestic violence is associated with environmental suppression of IQ in young children. *Development and Psychopathology*. 15, 297-311
- Losel, F., Bender, D., & Bliesener, T. (1992). Psychology and law: International perspectives. No: ISBN 3-11-013725-9, 581.
- Luthar, S. S., & Zelazo, L. B. (2003). *Research on resilience: An integrative review*. In Luthar S. S. (ed): *Resilience and vulnerability: Adoption in the context of childhood adversities*. New York, Cambridge, 489-509.
- Luthar, S. S., & Zigler, E. (1999). Vulnerability and competence: A review of research on resilience in childhood. *American Journal of Orthopsychiatry* 61, 6-22.
- Martin, A. (2008). Enhancing student motivation and engagement: The effects of a multidimensional intervention. *Contemporary Educational Psychology*, 33, 239-269.

- Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist* 56, 227-238.
- Masten, A., Burt, K., Roisman, G., Obradovic, J., Long, J., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology*, 16, 1071-1094.
- Masten, A., & Coatsworth, J. D. (1998). The development of competence in favourable and unfavourable environments: Lessons from research on successful children. *American Psychologist*, 53, 205-220.
- Maughen, B., Collishaw, S., Meltzer, H., & Goodman, R. (2008). Recent trends in UK child and adolescent mental health. *Social Psychiatry and Psychiatry Epidemiology*, 43, 305-310.
- McKnight, E., Huebner, S., & Suldo, S. (2002). Relationships among stressful life events, temperament, problem behavior, and global life satisfaction in adolescents. *Psychology in Schools*, 39, 677-687.
- Commonwealth Department of Health and Ageing, (1999). *Mental Health Promotion and Prevention National Action Plan*. Commonwealth of Australia 2000.
- Mickel, E., & Liddie-Hamilton, B. (2002). Family therapy in transition: African centered family healing. *International Journal of Reality Therapy*, 22, 34-36.
- Neil, A., & Christensen, H. (2007). Australian school-based prevention and early intervention programs for anxiety and depression: A systematic review. *Medical Journal of Australia*, 186, 305.
- Panksepp, J. (1998). *Affective neuroscience: The foundations of human and animal emotions*: Oxford University Press, USA.

- Passaro, P., Moon, M., Wiest, D., & Wong, E. (2004). A model for school psychology practice: addressing the needs of students with emotional and behavioral challenges through the use of an in-school support room and reality therapy. *Adolescence*, 39, 503-518.
- Perkins, D. F. (1997). *Adolescence: Developmental tasks. Fact sheet FCS 2118*. Department of family, youth and community sciences. University of Florida. Retrieved from <http://edis.ifas.ufl.edu>
- Rachor, R. (1995). An evaluation of the first step PASSAGES domestic violence program. *Journal of Reality Therapy*, 14, 29-36.
- Radtke, L., Sapp, M., & Farrell, W. (1997). Reality therapy: A meta-analysis. *International Journal of Reality Therapy*, 17, 4-9.
- Reis, H. (1994). Domains of experience: Investigating relationship processes from three perspectives. *Theoretical Frameworks for Personal Relationships*, 87-110.
- Roberts, C. M. (1999). The prevention of depression in children and adolescents. *Australian Psychologist*, 34, 49-57.
- Rosenman, S. J. (1998). Preventing suicide: what will work and what will not. *Medical Journal of Australia*, 169, 100-102.
- Rutter, M. (1984). Resilient children. Why some disadvantaged children overcome their environments, and how we can help, *Psychology Today*, 3, 57-65.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316-331.

- Rutter, M. (1989). Isle of Wight revisited: Twenty-five years of child psychiatric epidemiology. *Journal of American Academy of Child & Adolescent Psychiatry*, 28, 633.
- Rutter, M. L. (1999). Psychosocial adversity and child psychopathology. *British Journal of Psychiatry*, 74, 480-549.
- Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
- Sawyer, M., Arney, F., Baghurst, P., Clark, J., Graetz, B., & Kosky, R. (2001). The mental health of young people in Australia: key findings from the child and adolescent component on the national survey of mental health and well-being. *Australian and New Zealand Journal of Psychiatry*, 35, 806-814.
- Sawyer, M.G.A.F., Baghurst, P.A., & Clark, J.J. (2000). *The mental health of young people in Australia*. Canberra: Mental health and special programs branch, Commonwealth Department of Health and Aged- Care.
- Sawyer, M., Sarris, A., Baghurst, P., Cornish, C., & Kalucy, R. (1990). The prevalence of emotional and behaviour disorders and patterns of service utilisation in children and adolescents. *Australian and New Zealand Journal of Psychiatry*, 24, 323-330.
- Seligman, M.E.P. (1995). *The optimistic child*. NSW: Random House Australia.
- Shochet, I., Dadds, M., Holland, D., Whitefield, K., Harnett, P., & Osgarby, S. (2001). The efficacy of a universal school-based program to prevent adolescent depression. *Journal of Clinical Child & Adolescent Psychology*, 30, 303-315.

- Shochet, I., Holland, D., & Whitefield, K. (1997). Resourceful adolescent program: Group leader's manual. *Brisbane, Queensland University of Technology*.
- Silverman, W., & Hinshaw, S. (2008). The second special issue on evidence-based psychosocial treatments for children and adolescents: A 10-year update. *Journal of Clinical Child & Adolescent Psychology*, 37, 1-7.
- Silverman, W., Pina, A., & Viswesvaran, C. (2008). Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child & Adolescent Psychology*, 37, 105-130.
- Sweeney, C., Gaffney, B., Martin, A., & Taaffe, M. (2006). *In the driving seat: Responsible behaviour- the key to happy relationships*. Ireland: WGII.
- Swenson, S. (1995). *Benjamin Franklin High School: What we are learning about teaching/learning strategies*. Orland Park, IL: Consolidated High School District 230.
- Weinfield, N. S., Sroufe, L. A., & Egeland, B. (2000). Attachment from infancy to to early adulthood in a high- risk sample: Continuity, discontinuity and their correlates. *Child Development* 71, 695-702.
- Werner, E. E., & Smith, R. (1977). *Kauai's children come of age*. Honolulu, University of Hawaii Press.
- Werner, E. & Smith, R. (1988) *Vulnerable but Invincible; A longitudinal study of resilient children and youth*. New York, Adams, Bannister and Cox.
- Wubbolding, R (2000). *Reality therapy for the 21st century*. Brunner-Routledge.
- Zubrick, S., Silburn, S., Garton, A., Burton, P., Dalby, R., & Carlton, J. (1995). *Western Australian child health survey: Developing health and well-being in the nineties*.

*Perth, Western Australia: Australian Bureau of Statistics and the Institute for
Child Health Research, 4303.*

Empirical Study

In The Driving Seat; A Coping Self-Regulation Training Program A Pilot Study

Abstract

Many child and adolescent interventions focus on treatment of mental health disorders rather than preventing the occurrence of such disorders. Comparatively little empirical research has focused on prevention, and examined interventions that incorporate treatment components that aim to enhance psychologically protective or resilience factors (Masten et al., 2004). The purpose of this study was to pilot test a behavioral intervention program called "*In The Driving Seat*" (Sweeney, Gaffney, Martin & Taaffe, 2006), a universal program that aims to develop and increase resilience factors such as autonomy, positive self-talk, relationship skills and task orientated coping behaviors. Changes in self perception, motivation and engagement, and coping strategies were assessed pre- and post-intervention of the "*In The Driving Seat*" program in a cluster random sample pilot study. No statistically significant improvements in the outcome measures were found. This may have been due to the possibility that these measures did not target the changes reported by participants and confounded by the use of a small and high functioning sample. Ceiling effects may have been a factor with participants reporting good levels of pre-morbid functioning on the study measures. Participants did report that the program was useful, with the most beneficial components being coping skills training, perspective-taking skills, and developing self-confidence in their own behavioral control abilities. These skills have been shown by researchers to contribute to positive mental wellbeing (Masten et al., 2004; Losel, Bender & Bliesner, 1992). It would be useful for future research to measure practical outcomes such as school attendance, suspension record etc in a randomized control trial that targets adolescents meeting specific pre-test criteria e.g. oppositional defiance disorder.

Historically, many child and adolescent interventions focus on treatment of mental health disorders once established rather than preventing the occurrence of such disorders (Silverman & Hinshaw, 2008; Silverman, Pina & Viswesvaren, 2008; Ferndon-david & Kaslow, 2008; Eyberg, Nelson & Boggs, 2008). Comparatively little empirical research has focused on prevention, and examined interventions that incorporate treatment components that aim to enhance the psychologically protective or resilience factors that predict good social and academic adjustment in children, and improved transition to adolescence and adulthood (Masten et al., 2004). In psychological literature more broadly, published research on negative emotions outweighs research on positive emotions by a ratio of 14:1 (Myres, 2000).

Norrish and Vella-Broderick (2009) report an increased emphasis on preventative approaches and applying positive psychology in adolescent settings (Chafouleas & Bray, 2004; Terjesen, Jacofsky, Froh, & DiGiuseppe, 2004). Positive psychology examines conditions and processes that promote optimal functioning, mental wellness and happiness (Seligman & Csikszentmihalyi, 2000). Internal adaptive factors that contribute to mental wellness include self-esteem, problem solving ability, peer relationships and temperament (Ferguson & Lynskey, 1996; Garmezy, 1985). Masten et al. (2004) identified autonomy, coping skills, and future goals as key factors for optimal functioning. Losel, Bender and Bliesner (1992) identified a positive perception of self and problem solving ability as important while self-esteem was also identified by Cole and Turner (1993) as a key factor. Cole and Turner identified low self-esteem as a predictor of depression and stated that increasing self-esteem is likely to decrease the onset of depression.

School Based Programs

Within educational settings, recent research has focused on the prevention of mental health issues through the teaching of protective mechanisms such as self-esteem, coping strategies, self-management skills, and problem-solving in school based settings (Glasser, 1992; Shochet et al., 2001; Cunningham, Brandon & Frydenberg, 2002; Passaro, Moon, Weist & Wong, 2004; Neill & Christensen, 2007). Depression, for example, has its peak incidence in mid to late adolescence (Sawyer, Baghurst & Clark, 2000) therefore the school years are a key focus for prevention programs.

Neill and Christensen (1997) reviewed a number of Australian universal prevention or early intervention programs. They reported positive outcomes either immediately or at follow-up in a large proportion of Australian based programs. The effect sizes for controlled trials varied from small (0.18) to moderate (0.83). 80% of indicated anxiety programs were associated with reductions in anxiety symptoms and 50% of indicated programs targeting depression were associated with reductions in depression symptoms. Results for universal programs were similar. Improvements were associated with 60% of universal programs targeting anxiety and 58% of universal programs targeting depression. The programs with the strongest evidence for effectiveness, according to Neil and Christensen (2007), were the FRIENDS program (Barrett, Sonderegger, & Sonderegger, N, 2001: a family based group Cognitive-Behavioral treatment for clinically anxious children), and the Resourceful Adolescent Program (RAP: Shochet, Holland & Whitefield, 1997: a program developed to promote mental health literacy in a school-based format focusing specifically on the prevention

of adolescent depression). Some of the studies reviewed by Neill and Christensen were underpowered and consequently some of their effects may have been missed. Also many of the trials collected follow-up information at one point only (6 months or 10 months), so the longer term effect of these programs is unclear. Although effect sizes and trial quality were variable Neill and Christensen's findings provide strong support for mental health prevention and early intervention programs. Both indicated and universal programs appear to produce short to medium term small to moderate reductions in anxiety and depression in schools.

Many school based programs incorporate adaptive coping and positive skill development into their framework (Neil & Christensen, 2007). This is to increase the likelihood of children functioning at optimal levels, despite adversity. Several authors identify the importance of meeting our basic needs to achieve optimal functioning (Ryan & Deci, 2000; Glasser 1998; Ellis, 1999). Ryan and Deci identified these needs as competence (also identified by Harter, 1978), relationship with others (also identified by Baumeister & Leary, 1995; Reis, 1994) and autonomy (also identified by DeCharms, 1968; Deci, 1975). Glasser (1998) identified our basic needs as survival, love and belonging, fun, power and freedom. According to Glasser (1998), when our basic needs (survival, love & belonging, fun, freedom and power) are not being satisfied it results in feelings of discomfort, distress, and negative behaviour such as "acting out". Ellis (1999) identified love, power, freedom and fun as "strong desires" in achieving happiness. The similar nature of these 'basic requirements' suggest a consensus in theoretical concepts of basic needs. Identifying the purpose of a behavior by relating it

to the need the behavior is attempting to satisfy may well contribute to choosing a behavior that meets those needs more effectively (Ellis, 1999).

A school based prevention program that includes a component that aims to increase understanding about decision making and their impact on behavior, such as "*In The Driving Seat*" (Sweeney, Gaffney, Martin & Taaffe, 2006), may well assist in the development of protective mechanisms in children. This program explores the concept that behaviour is driven by our needs and explores how participants can best meet their needs in a socially appropriate way. The "*In The Driving Seat*" intervention program was developed by Sweeney et al. (2006) and is based on a Reality Therapy/Choice Theory (RT/CT) frame-work (Glasser, 1998, 1992, 1984). Programs such as FRIENDS and the Resourceful Adolescent Program (RAP-A) have to date used a Cognitive Behavioral Therapy (CBT) approach. The basic concepts underlying CT/RT have moved away from the traditional CBT emphasis on changing or correcting one's thoughts in order to overcome suffering. RT aims to help the person examine his or her "Wants" (Quality World) and "Doings" (actions) and by utilizing a self-evaluation process, alter the direction of his or her "Thinking" and "Doing" so they can live happier lives. In other words RT aims to change our relationship with our "Wants" and our "Doings" so we can become free from ineffective actions and free from the patterns that bind us and prevent us from living a flexible, meaningful and enjoyable life. In the service of these aims RT incorporates cognitive challenge, paradoxical techniques and a wide range of behavioral approaches already known to be effective from CBT.

As with CBT, RT teaches people to evaluate their thoughts, beliefs and values and their effectiveness in their lives. However, the main focus of RT interventions is to teach people to change their ACTIONS. RT contends that we do have a huge amount of control over our actions and it is through our action (doing) that we create a happy and meaningful life. To quote Dr Ali Sahebi (personal communication, Jan 23rd 2010), “We can act our way to a new way of thinking quicker than we can think our way to a new way of acting”.

The "*In The Driving Seat*" program is designed to help participants examine the choices they make in situations that can have either detrimental or positive consequences. Children are encouraged to see their role in the way they respond to situations and to evaluate their choice of behavior. The key Choice Theory assumptions are that people;

- Are internally motivated
- Have five basic needs which act as motivators i.e. Survival, Love & Belonging, Freedom, Fun and Power.
- Have a unique set of 'Quality World' pictures (things of import to that person)
- Through 'Total Behavior' act on the world to satisfy these quality world pictures and in so doing, meet our basic needs.

(Appendix A: Choice Theory Concepts; Appendix B: Choice Theory Axioms)

The modules in the *ITDS* program include increasing awareness of why we behave in a particular way and identifying what basic need we are attempting to satisfy? For example when we visit our friends we are meeting our love and belonging need, when we compete in a sport or play a musical instrument we are meeting our power need. Modules examine how to tackle day to day problems through 'Total Behavior' i.e. looking at what we are doing, thinking and feeling both emotionally and physically, and the importance of perspective. They also include identifying what is in our 'Quality World' i.e. all the people, values, places and things that are most important to us and that satisfy our needs. Also included are modules on thinking positively both about ourselves and challenging situations we are in through the use of positive self-talk, identification of what we can and cannot control and goal-setting. The program incorporates many of the aforementioned protective factors identified to contribute to mental wellness.

The current study involves a pilot, block or cluster randomization, pre-test, post-test evaluation of a coping self-regulation training program (*In The Driving Seat*) that aims to increase psychological protective mechanisms, such as coping, self-regulation and problem solving skills, in primary-school aged children. The program is designed for delivery as part of a school curriculum.

The Aims of This Study are to:

- Test the efficacy of the program by examining if participants will report higher self-esteem, academic motivation and engagement, and coping strategies following the intervention and in comparison to a control group.

- Identify what specific skills taught in the program participants consider most beneficial
- Add to the current research data on Reality Therapy/Choice Theory

It is hypothesized that relative to the control group, participants in the "*In The Driving Seat*" program will report higher self-esteem, academic motivation and engagement, and coping strategies following the intervention.

Due to the exploratory nature of field testing research, there are no a priori hypothesizes related to participants' satisfaction with the program, or about the specific components they might find most useful.

Method

Program Facilitator

The program facilitator was a forty-four year old, female intern psychologist completing her second year of study in the University of Tasmania's Clinical Masters program. She had completed her certification in Reality Therapy/Choice Theory and co-wrote the "*In The Driving Seat*" intervention program. This was a pilot facilitation of the program as the program had not been previously presented in its current format.

Participants

The intervention group consisted of 26 participants, 15 girls and 11 boys. The mean age of participants in this group was 11.2 years ($SD = 0.45$ years) and all were sixth grade students. The control group consisted of 25 participants at pre-test but reduced to 14 at post-test due to invalid questionnaire completion. Of these 11 were

girls and 3 were boys. The average age of the control group participants was 10.5 years ($SD = 0.52$ years) and all were fifth grade students. All participants were students who attended a public primary school in an urban Australian setting.

Measures

The global self-worth subscale of self-perception profile for children (SPPC: Harter, 1985).

The SPPC is a 36-item self-report measure of children's own evaluations of personal competence in five domains and global self-worth. The five domains are social acceptance (e.g. "Some kids find it hard to make friends; but other kids find it's pretty easy to make friends"), scholastic competence (e.g. "Some kids feel that they are very good at their schoolwork"), athletic competence (e.g. "Some kids do very well at all kinds of sports"), physical appearance (e.g. "Some kids are happy with the way they look") and behavioural conduct (e.g. "Some kids often do not like the way they behave'). Responding to each item is a two-step process. First, children indicate whether they are like those children who are good at a particular activity or like other children who are not. Then children mark whether the statement they selected is "really true for me" or 'sort of true for me.' Item scores are converted to 4-point rating scales such that high scores reflect greater self-perceived social acceptance, scholastic competence, athletic competence, physical appearance and behavioural conduct. The measure has good internal consistency. Cronbach's alphas range from 0.75 to 0.80 for children in third through eighth grade (Harter, 1985). In a study validating depression and anxiety measures by Cole, Martin, Peeke, Henderson and Harwell (1998)

Cronbach's alphas for SPCC were 0.80 for black children and 0.82 for white children. Estimates of test-retest reliability over a 3-month interval also ranged from 0.75 to 0.80 (Harter, 1982) and 0.75 to 0.82 (Harter, 1985) indicating good internal consistency.

SPCC-teacher rating scale (Harter, 1985).

The teacher rating scale was used to gain feedback from teacher observations. This scale parallels the SPCC and teachers were asked to indicate for each child what they felt to be his/her actual competence on each question, in their opinion. They were asked to first decide what kind of child he or she is like e.g. "This child is really good at his/her homework" or "This child can't do the school work assigned". They are then asked to decide if this is just sort of true or really true for that individual. Muris, Meesters and Fjen (2002) found that the SPCC and its parallel teacher scale correlated in a theoretically meaningful way with child and teacher reports of personality and psychopathology. Their findings confirmed the reliability and validity of the SPCC self-report measure for assessing children's self-esteem.

The motivation and engagement scale; junior- school (MES-JS; Martin, 2007).

The MES-JS is a 44-item instrument that measures academic motivation and engagement on six adaptive cognitive and behavioural dimensions. Adaptive cognitions are related to self-efficacy (e.g., "If I try hard I believe I can do my schoolwork well"), mastery orientation (e.g. "I feel very pleased with myself when I really understand what I am taught at school") and valuing (e.g. "learning at school is important"). Adaptive behaviors include; persistence (e.g. "If my homework is difficult I will keep working at

it trying to figure it out”), planning (e.g. “When I do my homework I get organised so I can do it well”) and task management (e.g. “I usually do my homework in places where I can concentrate”). Impeding/maladaptive cognitive dimensions are anxiety (e.g. “when I have a project to do I worry about it a lot”), failure avoidance (e.g. “The main reason I try at school is because I don’t want to disappoint my parents”) and uncertain control (e.g. “I don’t know how to get good marks at school”). Maladaptive behavioural dimensions are; self-handicapping (e.g. “sometimes I don’t try hard at school so I have a reason if I don’t do well”) and disengagement (e.g. “I don’t really care about school any more”). For each item in the Motivation and Engagement scale, students rate themselves on a 5-point Likert-type scale as follows; 1 = “Disagree Strongly”, 2 = “Disagree”, 3 = “Neither Agree nor Disagree”, 4 = “Agree” and 5 = “Agree Strongly”. The measure has normative data related to grade 4-6 students (9 to 13 yrs; Chronbach’s alpha 0.78). Previous results (Green, Martin, & Marsh, 2007; Martin & Marsh, 2006) provided strong psychometric support for the factor structure of the instrument. Raw scores for each subscale on the MES-JS can be converted into motivation quotient (MQ) scores as determined by the manual. However, any statistical analyses used have been performed using the raw scores as is suggested in the manual (Martin, 1997).

The coping strategies indicator (CSI: Amirkhan, 1990).

The CSI was used to assess coping abilities. CSI is a short self-report questionnaire that assesses specific responses to real-world stressors. It contains 33 items that represent three categories of coping response. The categories are problem solving, seeking social support and avoidance. Problem solving targets use of strategies

to solve problems (Amirkhan, 1990) e.g. "Set some goals for yourself to deal with the situation". Seeking social support relates to the need for human contact during times of duress (Amirkhan, 1990) e.g. "Accepted sympathy and understanding from someone". Avoidance responses relate to efforts to avoid problems e.g. "Did all you could to stop others from seeing how bad things really were". Each category is composed of 11 separate items. Participants responded to each coping item on a three point Likert type scale where one equals "not at all", two equals "a little" and three equals "a lot", based on a problem they experienced in the last six months.

Amirkhan (1990) reported that the scales in the CSI are independent of one another, free of demographic influences, recall problems and social desirability. Internal consistency, test-retest reliability and construct validity are consistent with a Cronbach alpha of 0.928 for Seeking Support, 0.894 for Problem Solving and 0.839 for Avoidance (Amirkhan, 1990) in their investigation of the correspondence between daily coping reports and retrospective coping recall.

Procedure

Before proceeding with the intervention approvals for the study were gained from both the Education Department (Tasmania) and the Tasmanian Social Sciences Human Research Ethics Committee (SS HREC) (Tas) Network (ethics number H10291). Once approval was obtained fifth and sixth grade teachers from a local primary school were approached to nominate their class for involvement in the study. Randomisation occurred at the class level, with one class ($n = 26$) allocated to the intervention condition, and another ($n = 25$) allocated to the control condition. Students

were tested twice (pre- and 1 week post-intervention), on a battery of standardised and validated measures of mood and coping self regulation outcomes. The three measures i.e. The Global Self-Worth Subscale of Self-Perception Profile for Children (Harter, 1985); The Motivation and Engagement Scale, (Martin, 2007) and the Coping Strategies Indicator, (Amirkhan, 1990), were given in a questionnaire booklet format and participants were asked to complete the booklets pre and post intervention i.e. the *"In The Driving Seat"* program.

The parent/guardian of all those who participated read an information sheet which indicated that participation was voluntary (Appendix C) and signed consent forms (Appendix D). The participants were given an oral presentation of the information in a child friendly format and also signed child consent forms (Appendix D).

Intervention

The *"In The Driving Seat"* (ITDS; Sweeney, Gaffney, Martin & Taaffe, 2006) program consisted of 16 bi-weekly sessions and was delivered in group format over an eight week period. Each session was approximately 40 minutes in duration. The program teaches a stress and coping model (Total Behaviour; Glasser, 1998) that explains links between actions, thoughts, feelings and behaviours and explains that by changing what we do and think, we can change how we feel, both emotionally and physically. It examines the pictures in our head of all the things we value (Quality World) and looks at how our perception of things influences our behavior (Balancing Scales). Other components of the program included positive self-talk and connecting and disconnecting habits when communicating. The format of the class involved

didactic presentation with facilitator led discussion. Below is an outline of individual session content,

Session 1.

Introduction using a Tai Chi breathing exercise and a discussion about “something you need to be happy”. *ITDS* booklets were given to participants and the concept that “all behaviour is purposeful” was discussed and “Basic Needs” were introduced.

Session 2.

Participants were asked to reflect on what they did at the weekend and “what needs were been satisfied?” Reframing was used to further examine basic needs and participants were asked e.g. “How did you satisfy your love and belonging need on the weekend?” A discussion of a story from the *ITDS* booklet was also included.

Session 3.

The 'Basic Needs' concept was further developed and questions such as “What have you done since last week to satisfy your e.g. power need?” and “How did you help yourself get what you really needed”.

Session 4.

In session 4 basic needs were further discussed and examples from the *ITDS* booklet were examined. This session also included a discussion about friendship, qualities important in a friend, why you are a good friend etc.

Session 5.

Session 5 reviewed exercises from session 4 relating to friendship e.g. "Describe a worthwhile person in your life".

Session 6.

Session 6 introduced the concept of perception and looked at a scenario from the *ITDS* booklet and the varied perceptions of other people.

Session 7.

Session 7 continued with the perception theme and looked at differing perceptions in a conflict situation. Positive self-talk was introduced as was the concept of "Balancing Scales".

Session 8.

Session 8 reviewed themes covered to date using exercises from the *ITDS* booklet and the concept of 'Total Behavior' and 'Behavior Mapping' was introduced and applied to dealing with a problem e.g. "My mum won't let me go to the disco" or "My teacher always picks on me".

Session 9.

Session 9 reviewed changing our self-talk from negative to positive and applied some problem scenarios to behaviour maps e.g. "What was I doing, thinking, feeling emotionally and physically when I was angering?" and "What could I have been thinking, doing, feeling emotionally and physically if I choose a different behaviour?".

Session 10.

Session 10 discussed 'Happiness' What is it? How can we be happy etc? The "Caring and Deadly habits" sections of the *ITDS* work book were discussed.

Session 11.

Session 11 reinforced participant awareness of when they are using the caring/deadly habits. It reviewed awareness of other peoples perspective, negative and positive self-talk, changing our behaviour by changing the thinking and doing components of total behaviour and the concept of having control over our own choices.

Session 12.

Session 12 further examined content covered and asked “What do I want? Is what I am doing helping me get what I want? Is my perspective of the situation helpful? What else can I do?” and “What is my plan?”

Session 13 & 14.

Sessions 13 and 14 of the program continued to discuss and review components of the program outlined above using worksheets, small group work and exercises from the *ITDS* booklet.

Session 15.

In session 15 participants were asked to think of a goal they had for themselves e.g. “Make the school football team” or “Get on better with my brother” and write it down. Their goal needed to be specific, measurable, attractive, and realistic and have a time frame (SMART). Participants were then asked to think about how they would achieve their goal using some of the things they had learned from the *ITDS* program.

Final session 16.

The final session of the program brainstormed some of the concepts participants found helpful or otherwise and answered any questions they may have had. A certificate of completion was also presented.

To control for therapist effects, the control group received the same number of contact hours with the researcher as the intervention group. The researcher met this group twice a week for 40 minute sessions over an eight week period but they did not receive any of the active skills training components of the *ITDS* program. The researcher participated with the control group class in a variety of activities ranging from Tai-Chi to art classes to “story time” and facilitated class based discussion on a range of topics including hobbies, TV etc designed to develop social interaction among participants. Participants in this group were also given the opportunity to do the intervention group activity at a later date if requested.

Design

The study used a 2 (Time; Pre-intervention, Post Intervention) by 2 (Group; Control, Intervention) mixed factorial design. The dependent variables in this study were the questionnaire subscales.

Results

Quantitative Results

Attrition.

All 26 students from the Intervention group and 14 students from the control group completed post assessments.

Data was analysed using ANCOVAs with pre-test scores on each of the questionnaire sub-scales used as the covariate. Means and standard deviations for each of the questionnaire sub-scales for both the control and intervention groups at pre-test are shown in Table 1.

Table 1: Means and Standard Deviations of Intervention and Control Group at Pre-test with Additional Normative Reference Group Means and Standard Deviations for Measures Used.

	Intervention Group		Control Group		Comparison Group	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Test (& Subscale)						
<i>Global Self-Worth Subscale of Self-Perception Profile for Children (SPCC:Harter, 1985)</i>						
Scholastic Competence	2.71	.79	3.27	.54	2.94	0.63
Social Acceptance	2.83	.76	3.04	.67	3.02	0.66
Athletic Competence	2.90	.67	3.04	.58	2.98	0.65
Physical Appearance	2.97	.68	3.25	.54	2.83	0.72
Behavioural Conduct	3.27	.63	3.51	.54	2.99	0.58
Global Self-Worth	3.18	.56	3.29	.46	3.15	0.63
<i>Motivation & Engagement Scale (Raw Scores: Max 100)</i>						
Self Belief	79.23	12.86	85.45	8.76	87	14
Valuing	85.83	11.25	86.78	9.56	89	12
Learning Focus	76.35	15.07	82.33	8.84	86	14
Planning	66.92	20.59	82.67	14.98	76	20
Task Management	72.12	19.35	79.00	12.71	81	18
Persistence	73.46	14.13	75.33	10.93	79	16
Anxiety	55.19	16.15	46.11	11.05	61	19
Failure Avoidance	48.27	18.81	38.00	12.51	58	25
Uncertain Control	52.69	12.51	40.89	11.39	51	20
Self Sabotage	40.96	12.49	35.67	11.00	43	20
Disengagement	34.49	14.12	37.67	12.23	36	16
<i>Coping Strategies Indicator</i>						
Problem Solving	20.05	5.60	21.53	6.23	18.73	7.02
Seeking Social Support	18.42	5.86	20.06	4.98	22.01	7.46
Avoidance	17.50	4.40	17.45	3.12	26.77	6.42
<i>Harter Self-Perception Scale - Teacher Version^b</i>						
Scholastic Competence	3.14	.62	3.47	.60	No Comparable norms	
Social Acceptance	2.86	.67	2.95	.60		
Athletic Competence	3.00	.56	3.17	.55		
Behavioural Conduct	3.09	.60	3.43	.38		

Notes: ^a The comparison group are the normative sixth grade group which are most equivalent to the intervention group

^b The *Physical Appearance* subscale was not included as the teachers did not rate this scale.

Harter self-perception profile for children (HSPC).

The ANCOVA for the global self-worth sub-scale showed a significant effect of group after co-varying for scores at pre-test, $F(1,36) = 4.72, p = .04, \eta_p^2 = 0.12$.

Inspection of the means revealed that the control group had a significantly higher post-test global self-worth score ($M = 3.45$) than the Intervention group ($M = 3.12$), when controlling for pre-test differences.

The ANCOVAs showed no significant group differences on the scholastic competence sub-scale, $F(1,36) = 0.43, p = 0.52, \eta_p^2 = 0.01$, social acceptance, $F(1,36) = 1.96, p = 0.17, \eta_p^2 = 0.05$, athletic competence, $F(1,35) = 1.96, p = 0.17, \eta_p^2 = 0.05$, physical appearance, $F(1,35) = 2.55, p = 0.12, \eta_p^2 = 0.07$, or behavioral conduct, $F(1,36) = 0.11, p = 0.74, \eta_p^2 = .003$, after controlling for differences at pre-test on the individual sub-scales.

Harter self-perception profile (HSPC) teacher.

The ANCOVAs showed no significant differences on the scholastic competence sub-scale, $F(1,38) = 1.78, p = 0.19, \eta_p^2 = .05$, social acceptance, $F(1,38) = 3.55, p = .07, \eta_p^2 = .09$, athletic competence, $F(1,35) = 2.73, p = 0.11, \eta_p^2 = .07$, or behavioral conduct, $F(1,36) = 0.15, p = 0.70, \eta_p^2 = .004$, after controlling for differences at pre-test on the individual sub-scales. The physical appearance sub-scale was not completed by teachers.

Motivation and engagement scale (MES) child.

The ANCOVA for the MES anxiety sub-scale also showed a trend to significance of group (independent variable) after co-varying for scores at pre-test, $F(1,38) = 4.01, p = .052, \eta_p^2 = 0.10$. Inspection of the means revealed that the control group had a significantly lower post-test anxiety score ($M = 41.67$) than the intervention group ($M = 56.73$) when controlling for pre-test differences. However this result can largely be dismissed because neither the control group, $t(14) = 1.00, p = 0.34$ or the treatment group, $t(25) = 0.68, p = 0.50$, showed significant change in anxiety subscale scores from pre-test to post-test. So despite the ANCOVA attempting to control for differences in pre-test scores, the ANCOVA results appear solely driven by the fact that the control group ($M = 41.66$) had significantly lower anxiety subtest means at pre-test than the intervention group ($M = 55.19$), $t(37.1) = 2.13, p = .04$ (after correcting for unequal group variances). The ANCOVAs showed no significant differences on the failure avoidance sub-scale, $F(1,38) = 1.39, p = 0.25, \eta_p^2 = .04$, learning focus, $F(1,38) = 1.32, p = 0.26, \eta_p^2 = .03$, self-belief, $F(1,38) = .001, p = 0.98, \eta_p^2 < .0010$, planning $F(1,38) = 1.02, p = 0.32, \eta_p^2 = .03$, valuing, $F(1,38) = 0.25, p = 0.62, \eta_p^2 = .01$, disengagement, $F(1,38) = 0.23, p = 0.64, \eta_p^2 = .01$, task management, $F(1,38) = 0.56, p = 0.46, \eta_p^2 = .01$, persistence, $F(1,38) = 1.35, p = 0.25, \eta_p^2 = .03$, uncertain control, $F(1,38) = 2.99, p = .09, \eta_p^2 = .07$, or self-sabotage, $F(1,38) = 2.22, p = 0.15, \eta_p^2 = .06$, after controlling for differences at pre-test on the individual sub-scales.

Coping strategy indicator (CSI) child.

The ANCOVAs showed no significant group differences on the problem solving sub-scale, $F(1,35) = 0.10$, $p = 0.75$, $\eta_p^2 = .003$, seeking social support, $F(1,35) = 1.80$, $p = 0.19$, $\eta_p^2 = .05$, or avoidance, $F(1,35) = 0.89$, $p = 0.35$, $\eta_p^2 = .03$, after controlling for differences at pre-test on the individual sub-scales.

Miscellaneous Analyses**ANCOVAs.**

Time (pre-test) by group (Control and Intervention) mixed ANOVAs were also conducted but the results of these analyses provided no interpretably different results to the ANCOVA analyses.

Power.

A post hoc power analyses was also conducted and an average power of 0.33 was determined indicating that there was very low power in the experimental design.

Qualitative Results

Qualitative data was collected from questionnaires completed by participants on completion of the program. The questionnaires asked six questions,

- 1) What part of the program was most helpful to you?
- 2) How and why?
- 3) How would you describe this program to someone who has never done it?
- 4) Is there anything in this program you would change?

- 5) What have you learned about making choices?
- 6) What caring habits have worked best for you?

Each of the 26 participants gave more than one response to each question.

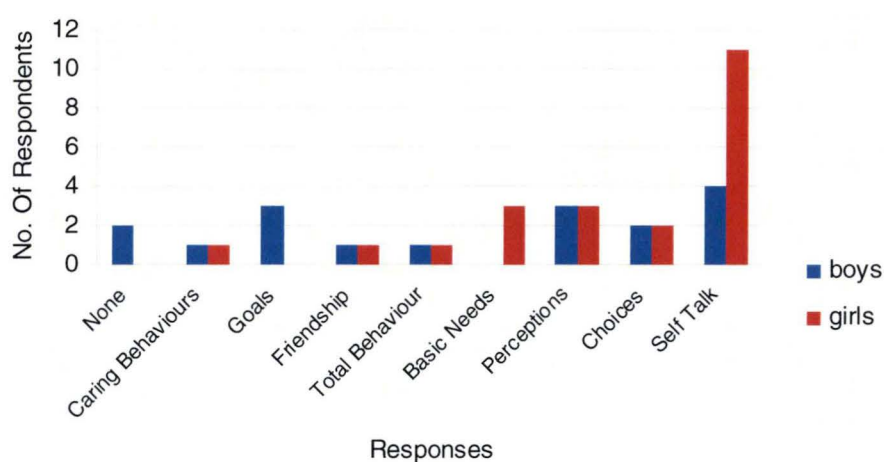


Figure 1. What part of the program worked best for you?

As can be seen in figure one the self-talk component of the program was cited by 11 of the 15 female participants (73.33%) and four of the 11 male participants (36.36%) as one of the most helpful part of the program. Basic needs were cited by 20% of the female participants and goals were cited by 27% of the male participants as helpful. Overall self-talk was cited as most helpful by 58% of all participants with perception cited as most helpful by 23% of all participants.

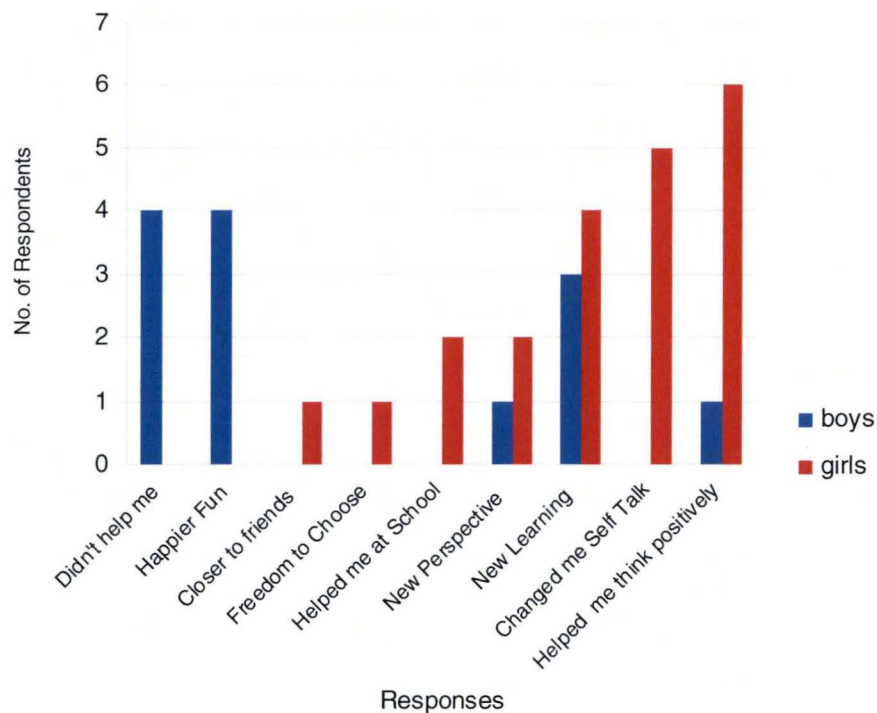


Figure 2. How and why was the program helpful to you?

Figure two highlights that six of the 15 female participants (40%) cited that the program helped them to think positively and five (33%) of the females cited a change in their self-talk in their answers to how and why this program was helpful to them. New learning, and happier/fun were each cited by three of the nine male participants (33%) as the reason how and why they felt the program was helpful. Three (33%) of the male participants cited that the program did not help them. Overall fourteen (54%) of the 26 participants cited new learning and positive thinking as components of the program they found helpful.

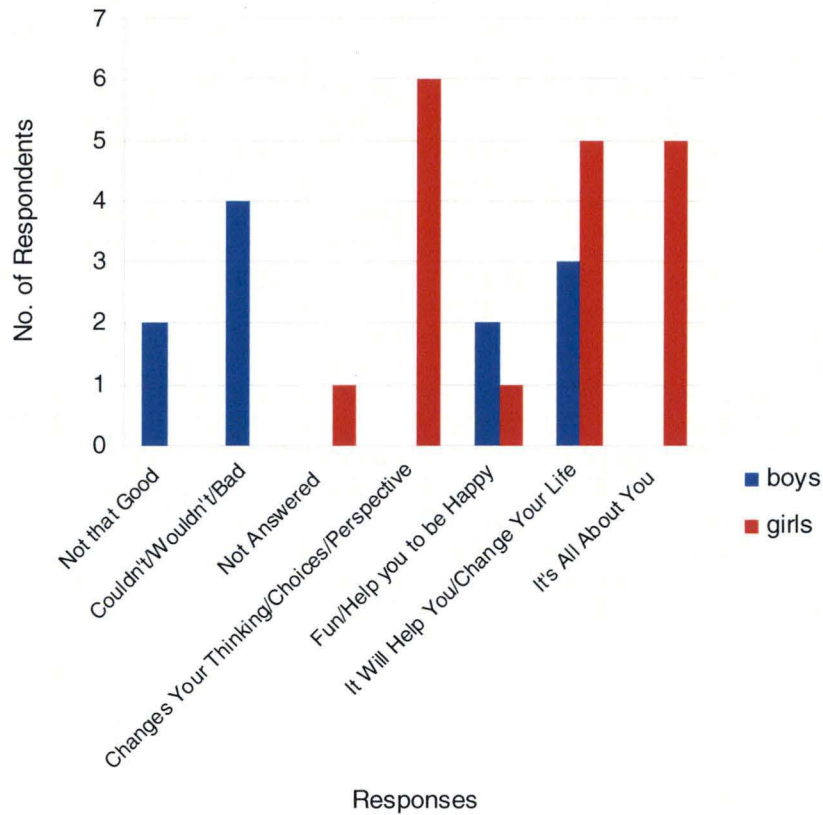


Figure 3. How would you describe this program to someone who has never done it?

As figure three illustrates six of the 15 female participants (40%) cited that when describing the program to others they would tell them that it would change their thinking, their choices and their perspective. Five (33%) of the female participants cited that they would tell others that the program was all about “you” and the same number of females (33%) would tell others that it would help them and change their lives. A similar percentage of male participants (33%) also said that they would tell others that the program would help them and change their lives. Eight (31%) of the total number of

twenty six participants cited that they would tell others that the program would help them and change their lives. 15% of the total number of twenty six participants cited that they could not or would not tell others about the program or would tell others that the program was bad. All of these participants were male (44% of male participants). Three (7.6%) of the twenty six participants cited that they would describe the program as not that good. All of these participants were male and represented 22% of male participants.

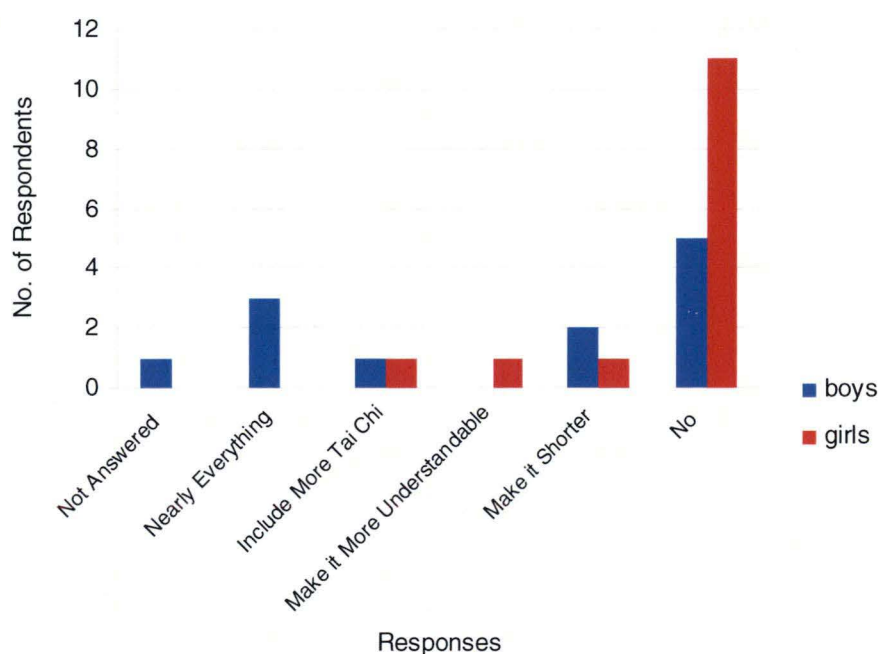


Figure 4. Is there anything in this program you would change?

As can be seen in figure four 16 (62%) of the total number of 26 participants cited that they would change nothing about the program (42% of females and 45% of males). Three (12%) of all participants cited that they would make the program shorter

and three (12%) of all participants (all male representing 33% of male participants) cited that they would change nearly everything about the program.

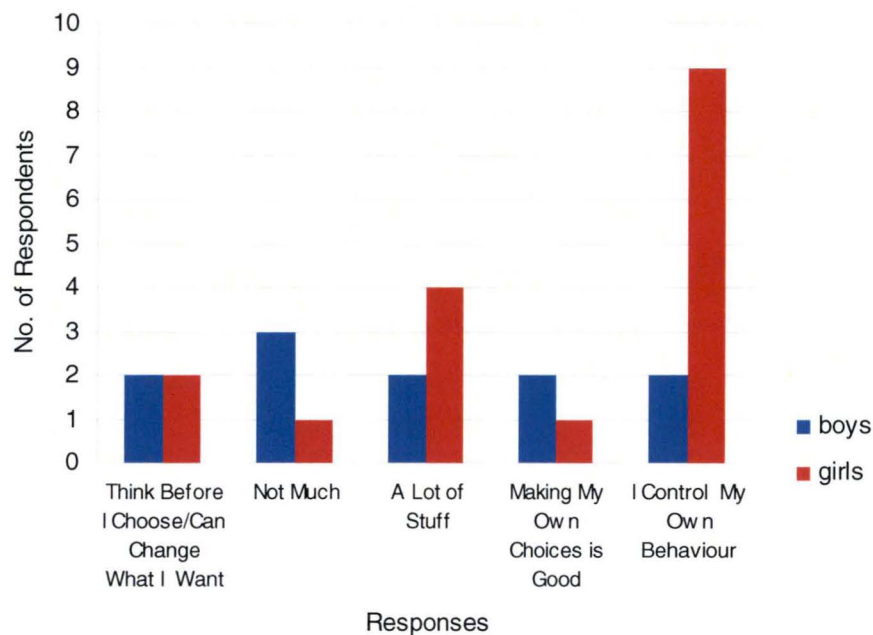


Figure 5. What have you learned about making choices?

As figure five illustrates, 11 (42%) of the total number of 26 participants cited the realization that “I” control my behavior and choices as one of the main things they learned about making choices. Three (12%) of all participants cited that they learned that making their own choices was a good thing while six (23%) of all participants cited that they learned “a lot” of stuff about making choices. Four (16%) of all participants cited that they learned that by thinking before making choices they can change what they do. Four (16%) of the 26 participants cited that they did not learn much about making choices (33% of male participants and 6.6% of females).

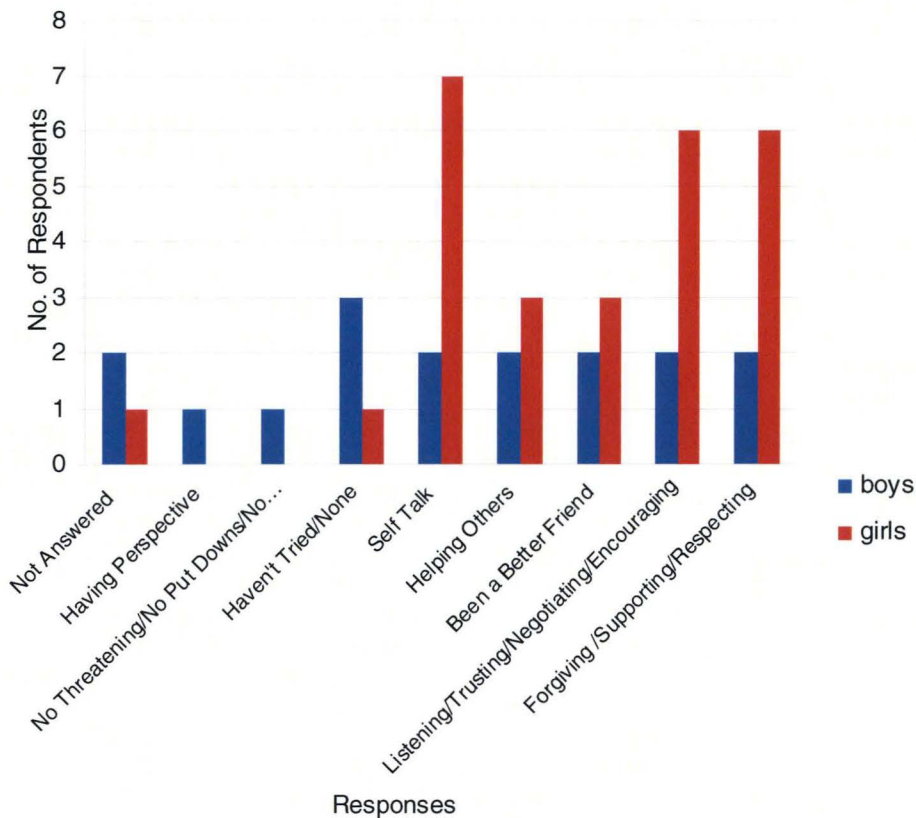


Figure 6. What caring habits worked best for you?

As can be seen in figure six nine (35%) of the 26 participants cited self-talk as one of the caring habits that worked well for them while forgiving, supporting and respecting was also cited by nine (35%) participants as some of the caring habits that worked best for them. Five (19%) participants cited been a better friend and helping others as some of the caring habits that worked best for them. Forgiving, supporting and respecting were cited by the highest percentage of males (33%) and self-talk was cited by the highest percentage of females (47%) as some of the caring habits they found most helpful. 40% of females cited listening, trusting, negotiating and encouraging as some

of the caring habits they found most helpful. 15% of all participants cited that they had not tried any or that none of the caring habits had worked for them. Of these 3.8% were female and 11.2% were male (33% of male participants and 6.7% of female participants).

Discussion

The aims of this study were to 1) Test the efficacy of the program by examining if participants will report higher self-esteem, academic motivation and engagement, and coping strategies following the intervention and in comparison to a control group.

2) Identify what specific skills taught in the program participants consider most beneficial and 3) Add to the current research data on Reality Therapy/Choice Theory.

The discussion below examines each of these aims in turn. It discusses the potential of the "*In The Driving Seat*" (ITDS) program as an effective intervention to promote mental wellbeing, in relation to current literature and makes recommendations for future research.

1) Test the intervention effect on children's self esteem, academic motivation and coping ability.

No significant effects of intervention on the study measures were found. There were a number of factors that may account for the null affects. The small sample size meant there was very low power in the study to detect an effect. Future studies should include a larger sample, with at least 30 per cell required to detect a quantitative treatment effect but delivery in a small group format of 10 to 12 per group to allow whole group contribution, is recommended. In the larger group class format (n=26)

there was a tendency for more outgoing students to lead group discussions. Smaller groups would facilitate more equable involvement across participants. Feedback from participants class teacher also supported small group delivery citing that “It is much easier to pace” and “It’s much easier for kids to share in small groups”.

The choice of measures may have meant that significant effects were missed. The intervention may have impacted upon other positive variables that were not assessed. For example, the issues that children value and consider important and that they applied their new *ITDS* skills to may relate more to peer relationships, or other aspects of their home and social life, rather than academic motivation and engagement. Future evaluation of *ITDS* should consider inclusion of broader social functioning, and coping skills related to interpersonal stressors.

The use of randomized control trials on therapy based programs is always going to be challenging to measure because of the difficulty in isolating the effectiveness of the therapy intervention. Over any period of time, particularly with an adolescent population changes in normal growth and development will occur. Are these changes due to therapy or just normal developmental experience and growth? Outcome measures such as school attendance, drug & alcohol use, incidence of involvement with police or school suspensions may be more practical independent measures of intervention effectiveness, particularly in terms of utilizing *ITDS* as part of a school curriculum.

This research was constrained by the use of a convenience sample and the need to randomize at a class level. The control group was significantly younger, average age

10.5 years as opposed to the intervention group average age of 11.2 years. This was relevant for all measures. It emerged from this research that variations in language and reading ability may have effected questionnaire completion and was the reason for a high number of invalid post-test questionnaires among the control group. The age difference was particularly relevant for the coping strategy indicator (CSI: Amirkhan, 1990) measure as it required a level of abstract thought. Development of abstract thinking is thought to occur between 11 yrs and 16 yrs depending on developmental/environmental exposure (Berk, 1991). In the CSI participants are asked to think of a problem they have had in the previous six months and answer a series of questions related to the problem. Participants found it particularly difficult to come up with a problem with some citing that "I don't have any problems". The problems cited were also very variable ranging from 'been late for school' to 'parents divorcing'. It is questionable if answers to both problems are equally reflective of individual coping strategies.

The significantly younger age of the control group and their earlier stage of development may mean that they are subject to more dynamic developmental change over a shorter period of time and this may have contributed to their higher level of global satisfaction. The fact that the control group were higher functioning at pre-test may also account for the higher levels of global functioning in the control group at post-test.

Qualitative feedback from the control group class teacher may also shed light on why the control group had higher levels of global functioning. She reported that the 11

control group members, who did not complete post-test measures, also had great difficulty completing measures at pre-test. It is possible that a high percentage of control group pre-test measures may not have been valid as cognitive understanding by these participants may have been lacking, thus effecting overall measures of global functioning.

Short follow-up might have meant that significant findings were missed as they may appear later. A further limitation was that design was pre-post test without follow-up due to time constraints. It is often at the follow-up stage that considerable change can be found e.g. Shochett et al., (2001).

There were several differences between Control and Intervention groups in pre-tests that may have reduced power to detect intervention effects. For example in both the self and teacher reports (HSPCC; Harter, 1985) the control group was functioning at a higher level than the intervention group on measures of scholastic competence and anxiety. This may have meant it was more difficult to show a greater benefit for the intervention group, compared to the control group, at post intervention. One subset of the teacher version of the HSPCC was also incomplete as teachers were reluctant to comment on the physical appearance of participants.

It is also worth noting that both groups received a similar amount of contact time with the researcher. While no specific components of *ITDS* were delivered to the control group it is feasible that some of the connecting habits practiced by the researcher were subliminally delivered to control participants. Another important factor is that the control group also practiced Tai Chi as part of their alternative program. It is possible

that this impacted more effectively with the control group and may account for improvements in control group post-tests. There is some tentative research supporting the positive effects of practicing Tai-chi in schools (Chunlei, 2007). Further investigation into this area is recommended.

It is also possible that the subjectivity associated with reliance on self report measures of both participants and teachers may have impacted on test outcomes. The issue of subjectivity highlights a challenge for any Reality Therapy/Choice Theory based study in that as highlighted in the literature review associated with this empirical study, Reality Therapy/Choice Theory is an internal control psychology. Reality Therapy has at its core, self-evaluation. It is a process driven rather than outcome driven therapy and its success or otherwise is dependent on the clients' self-evaluation. Assessing the intensity of clients' needs and other aspects of Reality Therapy/Choice Theory is fundamentally dependent on subjective self-reporting. It may be that an intervention of this kind will require measures of a subjective nature.

There were also pre-test differences in teacher reported perception of scholastic competence. There is anecdotal evidence that this is a relevant point. One of teachers reported that in completing the Harter Self-Perception Scale – Teacher Version, the first few questions are crucial, "If you start positive it affects how you answer the rest of the questions".

The intervention group had almost twice as many boys (73%) as the control group (44%). It is possible that either the content or the format of "*In The Driving Seat*" did not appeal as much to boys. In fact, it is notable that the participants who expressed

the lowest satisfaction rating with the intervention were all male. There is evidence that boys and girls differ in their learning styles (Honigsfeld & Dunn, 2003). For example, boys are more kinesthetic than girls and learn more by doing. They also learn more visually while girls learn more via auditory means. Boys also learn better through pair and group activities while girls are teacher orientated. Future research may need to consider ways to adapt “*In The Driving Seat*” so that it appeals more to boys by including more group based activity and visual teaching methods. The inclusion of a physical component is particularly important for boys in view of their preference for ‘doing’ activities (Honigsfeld & Dunn, 2003). Future research should examine the advantages of delivering this program to specific populations using a more dynamic combination of physical exercise and *ITDS* e.g. remote adolescent aboriginal communities.

2) Identification of specific skills participants found useful

Participants were asked to complete a six item questionnaire (Appendix F) to facilitate qualitative assessment of specific areas of the *ITDS* program that they identified as beneficial to them. The qualitative feedback from the participants demonstrates a high degree of learning. Of the 26 questionnaires returned only five could be viewed as anything less than highly positive (all five participants were male). However, among those five participants' feedback there appeared to be some inconsistencies. For example one participant reported that the program was “A load of crap” but when asked “What have you learned about making choices?” responded “I control my own choices” indicating some level of internal control psychology.

In the preceding literature review protective factors and adaptive resources that were found to increase resilience and the likelihood of mental wellbeing included autonomy, increased self-esteem and self identity (Garmazy, 1885; Losel, Bender & Bliesener, 1992; Masten & Coatsworth, 1998; Masten et al., 2004). Losel, Bender and Bliesener (1992), stated that resilient adolescents are more likely to perceive themselves as less helpless, have a flexible temperament, be active problem solvers, have a realistic view of the future and have a positive self concept. Masten and Coatsworth (1998) refer to the creation of a stable and cohesive sense of self-identity as a key task for adolescents. Participant feedback post intervention indicated an increase in awareness of many of these protective factors and adaptive resources. Comments post intervention illustrated an awareness of autonomy and responsibility as well as a reduced perception of helplessness and a realistic outlook e.g. "This program is about making your own choices"; "The only person you can control is yourself and no one else". The idea that changing what they do and the way they think could change how they feel was something they reported as actively applying during the course of the research and found beneficial and highlights an awareness of internal control. One participant stated "(the program) will help you see how you can change the way you act and make you think more". Participants' stated that their awareness that "what they think" is within their control and their experience that "(they) could do it", during the course of the research, was a key component of the program. Freedom to make their own choices was also highlighted post-intervention by participants "It is up to you, you can be angry, sad or happy but at the end of the day you realize you're making the choice". This indicates an increased awareness of participants' level of autonomy, an important

protective/adaptive factor (Rutter, 1999; Luther & Zigler, 1999; Masten, 2001; Masten et al., 2004).

One of the components of the program participants cited as most beneficial was the coping skill of positive self-talk introduced in session 7. The idea of “re-framing” their self-talk was novel for participants. Positive self-talk is highlighted by Seligman and Csikszentmihalyi, (2000) as a protective factor. One participant reported this as a key learning component for her “Because now when I say something to myself I can change to a positive and feel better”. Overall self- talk was cited by the highest proportion of participants (58%) as one of the most beneficial learning components of the program.

Awareness of other people’s perspective was also a new concept for participants and one reported as particularly useful in coping with conflict situations (problem solving). For one participant “It made me realize that people think different and don’t always think the same as you” and another related that “Now I see things in other people’s point of view”. The concept of having control of your own behavior but not the behavior of others also resonated with participants. As one cited “The only person you can control is yourself and nobody else”. This increased awareness of perception was reported by participants as helping them to communicate better and to resolve conflict both with peers and at home. This increased ability to communicate with others is also cited as a protective factor (Luther & Zalaso, 2003; Martin, 2001; Losel, Bender & Bleisener, 1992).

Many participants reported that the learning from the program would help them in the future. They reported that skills learned would "Help me out in school", "Make me think about positive self talk", "Be nicer to my friends cause myself and my friends are closer as friends now" and as one participant stated when asked how they would describe the program to someone who had never done it, " It is a program that will make you think about yourself. If you do this program it will change your life because it makes you think about you". This further highlights an increase in ability to connect with friends and also illustrates future goal orientation and coping skills, other protective factors cited by Masten et al., (2004).

Other programs have reported improvements in positive thinking e.g. the Optimistic Thinking Skills program; problem solving e.g. the FRIENDS program; goal setting e.g. the Best of Coping program and reductions in depression e.g. the Resourceful Adolescent program. Piloting of the *In The Driving Seat* program suggests that it has a wide ranging impact on protective factors including autonomy, coping skills, increased communication skills, responsibility for behavior and choice and goal setting. *ITDS* differs from the above CBT school based intervention programs in that it highlights the basic or innate needs that direct behavior as cited by Baer and Wolf (1987); Panksepp, (1998), Ellis (1999), Ryan and Deci (2000) and Luther and Prince (2003). It helps participants to become aware of what need their current behavior is trying to meet and what alternate behaviors can better help them meet these needs. *ITDS* helps participants to explore their "Quality World" i.e. what they REALLY want, and what they are currently doing (actions) and by utilising a self evaluation process alter the direction of his or her "Doing" and "Thinking" so they can live happier lives.

ITDS uses the visual symbol of the "Behavioral Car" to help participants understand that they control their own behavior. It purports that we have a huge amount of control over our actions and it is through our action that we create a happy life.

It is a program designed for universal delivery and this pilot suggests it is suitable for delivery as part of a school curriculum. A further advantage of *ITDS* is that it can be facilitated by teachers upon completion of basic training in Reality Therapy, easily accessible nationwide in Australia. Parents can also train in Reality Therapy thus allowing a homogenous community based approach. This would help facilitate some of the external environmental protective factors highlighted by Kim-Cohen, Moffitt, Caspi and Taylor (2004) i.e. positive parenting and positive relationships in the school environment.

3) Add to the research data on Reality Therapy/Choice Theory

Qualitative feedback from the pilot test of the "*In The Driving Seat*" program suggests that it can assist adolescents in the development of skills that develop mental wellbeing. Piloting the program suggest it is suitable for delivery within a school environment and could be adopted as part of the school curriculum. It fits in well with class periods (i.e. 40 min sessions) and the program is flexible enough in delivery to fit within the constraints of a typical school environment with its associated adjustments around school meetings, sports days, school holidays and space restrictions. Qualitative feedback from participants highly recommends the program to future participants. The class teacher was highly supportive of the program and reported that she had often used elements of the program as teaching points in other class situations citing that each

session “provided stepping stones for further group discussion”. The class teacher also noted that the “book format of the program was highly suitable for delivery as part of a curriculum”.

Perhaps one of the most important attributes of the *ITDS* program is the potential for the program to be delivered by class teachers. Lowry, Webster, Barrett and Dadds (2001), highlighted that in many cases teachers can be as effective as psychologists in delivering class room programs. Reynolds, Girling, Coker and Eastwood (2006), however identified many difficulties in using teachers to deliver mental health preventative programs. They cited lack of knowledge of specific psychological models such as Cognitive Behavioral techniques. The Reality Therapy based *ITDS* program can overcome this difficulty as it requires minimal basic training and can easily be delivered by teachers in the classroom. It would require a basic training period of thirty-six hours and can potentially be delivered to teachers in the form of night classes. There is also the avenue of completion of further training in Reality Therapy through the William Glasser Institute of Australia should teachers wish to pursue it. Delivery by class teachers would allow repetition of delivery and consistent application through a broad range of classroom activities. It would also facilitate a positive connection for students with the school environment. This is an important adaptive resilience factor in the development of adolescent self-efficacy (Losel, Bender & Bleisener, 1992; Mental Health Promotion and Prevention National Action Plan, 1999). Furthermore, there is a huge need for teacher implemented programs because of the limited resources available for mental health services for adolescents relative to the demand for these services.

Delivery of the *ITDS* program by teachers as part of a school based curriculum would be more fiscally sustainable than employing external deliverers.

The ease with which people can be trained in Reality Therapy is also relevant for family orientated intervention models. The role of family environment and parenting style on the levels of distress experienced by adolescents have been reported by Garnezy (1985), Masten (2001) and Luthar and Zelazo (2003). Arnett (1999) refers to parental conflict as a key challenge of adolescents. Parenting courses can be implemented using a Reality Therapy *ITDS* program, suitably edited for an adult population. Community based training in Reality Therapy would as mentioned above, ensure a homogenous approach to developing adolescent mental wellbeing.

Reynolds, Girling, Coker and Eastwood (2006), also reported difficulties with Cognitive Behavioral based programs from a participant perspective. If participants cannot understand the cognitive model, as delivered in CBT based programs, then the cognitive elements of CBT are unlikely to be of any direct value to them. The *ITDS* program simplifies the connection between acting, thinking and feeling, both emotionally and physically, by using the visual concept of the "Total Behavior Car". Participants could relate to steering a car and the idea that turning the front wheels (representing acting and thinking) was directly under their control. They could also visualize that the back wheels must follow the front wheels and therefore by changing their acting and thinking (i.e. steering the car in a different direction) they could also change the way that they feel. This ease of understanding is particularly relevant for

younger participants whose cognitive ability may be lacking because of their developmental stage.

A key component of delivery in terms of participant focus, according to participants' and teachers self-report was the physical component of Tai Chi introduced at the beginning, mid-way point and end of each session. When this research was presented to over 80 members of the teaching profession at a recent William Glasser Institute of Australia (WGIA) conference in October, 2009, the overwhelming feedback was the view that this physical component was a key factor in the successful delivery of the program in a school setting. Many teachers reported that in their experience this was a key element missing from other programs. As one observer cited "It gave children a break and a chance to refocus". The teaching of the specific physical component used can easily be incorporated into the teacher training. The overwhelming positive response from the WGIA members was such that the *ITDS* program has been re-printed in Australia for distribution through the WGIA (www.wgia.au).

Recommendations for delivery of the "*In The Driving Seat*" program

This was a pilot study. It was the first time the "*In The Driving Seat*" program has been implemented to fifth and sixth grade students in its current format. A number of recommendations can be drawn regarding the delivery format. The session length of 40 minute duration seemed appropriate if the physical component was introduced at the beginning and mid-way points to help students re-focus. The experience of the researcher was that 20 minutes was the maximum period of concentration for participants without an intervention exercise. One student reported that "At times it was

a bit long but over-all was quite good”. Feed-back also highlighted that participants appreciated the emphasis that “This is not a test” and that “The right answer is your answer because this program is all about you”.

The program content seemed to flow quite well with each topic leading logically into the next and reaching a conclusion with-in the eight week time frame. Some minor changes recommended include using varied key characters. Robbie and Penny, the main characters used, were perceived by some participants as “boyfriend/ girlfriend” rather than as “friends” and this required clarification for participants when discussing the “Love and Belonging” component of basic needs. Another minor adjustment recommended is the inclusion of another behavioral map for participants to complete when relating to their individual problem example. Also the term “deadly” habits can be perceived as a good thing by some cultures e.g. in Aboriginal Australian culture the term is regarded as positive not negative. This component should be re-named as the “connecting and disconnecting habits” to avoid misinterpretation.

Smaller groups, as recommended above, would facilitate more time to focus on activity based components of the program which would appeal to the kinesthetic and visual learning preferences of male participants. Combining a more physical activity than Tai Chi in conjunction with *ITDS* may be beneficial.

Recommendations for Future Research

One of the aims of this research was to ascertain any quantitative changes in self-esteem as measured by the Harter Self-perception Profile for Children (HSPPC: Harter, 1985), motivation and engagement as measured by The Motivation and Engagement

Scale-Junior school (MES-J: Martin, 2007) and coping strategies as measured by The Coping Strategies Indicator (CSI: Amirkhan, 1990) after participating in the "*In The Driving Seat*" program. If the following recommendations are considered the Harter Self-perception Profile (Harter, 1985) and the Motivation and Engagement Scale (Martin, 2007) are valid measures of change to use in this context. Consider better matching of participants in groups. Future research should consider individual matching of participants. As highlighted above variations in language and reading ability may have effected questionnaire completion and was the reason for a high number of invalid questionnaires among the control group. Testing was completed in a class format and results may benefit from individual supervision and explanation of test completion requirements. Matching of participants by age and academic ability would also benefit the research as some participants in the younger age control group struggled with the questionnaire content.

As highlighted above, the Coping Strategies Indicator proved to be a less appropriate measure of change than anticipated. It may be more appropriate given the time span of the research to use a more suitable quantitative measure such as a measure of locus of control (Anderson, 1977). This would give a more concrete measure of participant's use of external and internal loci of control and ability to cope. As Choice Theory/Reality Therapy is an internal control psychology and specifically targets the development of internal control this may be a measure more sensitive to change with participation in the *ITDS* program. In view of its application within a school curriculum practical independent behavioral measures such as school attendance, drug/alcohol use and school suspension are also recommended.

In order to ascertain quantitative statistical change future research should consider delivering the *ITDS* program to a larger total number of participants in a number of smaller groups. The size of the intervention group (N=26) was quite large for an intervention program of this nature. Most beneficial effects in previous trials have been with group sizes of approx 8 to 12 (Wubbolding, 2000). As mentioned above this contention is also supported by participants' class teacher.

One of the primary difficulties when assessing change is if participants have no previously diagnosed issues. Using a population with a previously diagnosed 'problem' such as anxiety or disruptive behavior is more likely to show quantitative statistical changes from implementing a program such as *ITDS* as pre-test performance is likely to highlight more potential for change. In relation to qualitative feedback future research should also consider using a Likert scale to quantify questionnaire responses. The use of focus groups is also recommended to capture any qualitative changes that are not easily quantifiable.

ITDS is a broad ranging preventative program and therefore it is difficult to isolate particular components that are mechanisms for change. As highlighted above participants reported that various components of the program effected change. This makes it difficult to identify specific tools to measure statistical changes. Practical outcome measures of school attendance, school suspension, conflict incidence etc are recommended and such outcomes are highly rated in attracting funding in an educational setting.

In summary the qualitative results from this research suggests that the "*In The Driving Seat*" program does assist adolescents in developing skills that support mental wellbeing. The elements of the *ITDS* program participants found most helpful and beneficial included reframing negative thinking into positive self-talk, understanding that other people see things differently (perspective), that we all have the power to choose our behavior and that the only behavior we can control is our own (autonomy/responsibility). The ability to reframe thoughts, the awareness of the varied perspective of others and the development of autonomy and responsibility are some of the key developmental tasks for adolescents (Perkins, 1997).

This pilot study, while elucidating much positive qualitative feedback in relation to its potential for developing protective factors and thus reducing mental illness in adolescents, has not produced any empirical quantitative data to support this. There is no doubt that as the preceding literature review highlighted, there is much need for empirical based evidence. It is fair to say that the qualitative results give much basis for further research. The *ITDS* program and the overall Quality School model offer a ready-made model to be implemented as part of the Commonwealth Mind Matters Program (MHPPNAP, 1999). The long-term mental health of young people is dependent on a long-term, consistent, whole school and community approach (Edmunds, 1982; Glasser, 1992; Dryden, 1995; MHPPNAP, 1999; Goodwin & Groundwater-Smith, 2000). As highlighted above, Reality Therapy/Choice Theory can easily be taught to students, teachers, school managers, parents and wider members of the community. The Reality Therapy/Choice Theory studies reviewed in the preceding literature review, while not of the highest empirical standards, definitely indicate the potential benefits of such a

model. The qualitative results of this pilot study did indicate an increase in levels of happiness that serve to further support its potential. As one participant commented "It (*ITDS*) teaches you how to be happy, I recommend it".

References

- Amirkhan, J. (1990). A factor analytically derived measure of coping: The coping strategy indicator. *Journal of Personality and Social Psychology*, 59, 1066-1074.
- Anderson, C. (1977). Locus of control, coping behaviors, and performance in a stress setting: A longitudinal study. *Journal of Applied Psychology*, 62, 446-451.
- Arnett, J. (1999). Adolescent storm and stress, Reconsidered. *American Psychologist*, 54, 317-326.
- Barrett, P. M., Farrell, L. J., Ollendick, T. H., & Dadds, M. (2006). Long-term outcomes of an Australian universal prevention trial of anxiety and depression symptoms in children and youth; an evaluation of the FRIENDS program. *Journal of Clinical Child Adolescent Psychology* 35, 403-411.
- Barrett, P., Sonderegger, R., & Sonderegger, N. (2001). Evaluation of an anxiety-prevention and positive-coping program (FRIENDS) for children and adolescents of non-English-speaking background. *Behaviour Change*, 18, 78-91.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-497.
- Berk, Laura E. (2000). *Child development 5th ed.* Needham Heights, MA: Allyn and Bacon.
- Chafouleas, S., & Bray, M. (2003). Introducing positive psychology: Finding a place within school psychology. *Psychology in the Schools*, 41(1), 1-5.

- Clonan, S. M., Chafouleas, S. M., McDougal, J. L., & Riley-Tillman, T. C. (2004). Positive psychology goes to school: Are we there yet? *Psychology in the Schools, 41*, 101-110.
- Cole, D., & Turner, J. (1993). Models of cognitive mediation and moderation in child depression. *Journal of Abnormal Psychology, 102*, 271-281.
- Cunningham, E., Brandon, C., & Frydenberg, E. (2002). Enhancing coping resources in early adolescence through a school-based program teaching optimistic thinking skills. *Anxiety, Stress & Coping, 15*, 369-381.
- David-Ferdon, C., & Kaslow, N. (2008). Evidence-based psychosocial treatments for child and adolescent depression. *Journal of Clinical Child & Adolescent Psychology, 37*, 62-104.
- DeCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. Academic Press.
- Deci, E. (1975). *Intrinsic motivation*: Plenum Press New York.
- Ellis, A. (1999). *Rational emotive behavior therapy as an internal control psychology*: National conference on Internal Control Psychology: Albert Ellis Institute, New York City.
- Ellis, A. (2000). Rational emotive behavior therapy as an internal control psychology. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 18*, 19-38.
- Eyberg, S., Nelson, M., & Boggs, S. (2008). Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology, 37*, 215-237.

- Fergusson, D., & Lynskey, M. (1996). Adolescent resiliency to family adversity. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 37, 281-292.
- Garmezy, N. (1985). Stress-resistant children: The search for protective factors. *Recent Research in Developmental Psychopathology*, 4, 213-233.
- Glasser, W. (1985). *Control therapy: A new explanation of how we control our lives*: Harper & Row.
- Glasser, W. (1990). *The quality school: Managing students without coercion*: Harper and Row Publishers, Inc., 10 East 53rd Street, New York, NY 10022.
- Glasser, W. (1998). *Choice theory: A new psychology of personal freedom*: Harper Collins.
- Harter, S. (1978). Effectance motivation reconsidered toward a developmental model. *Human Development* 18, 34-64.
- Harter, S. (1982). The perceived competence scale for children. *Child Development*, 53, 87-97.
- Harter, S. (1985). *Manual for the self-perception profile for children*: University of Denver, Denver, CO.
- Honigsfeld, A., & Dunn, R. (2003). High school male and female learning-style similarities and differences in diverse nations. *The Journal of Educational Research*, 96, 195-206.
- Institute, T. W. G. (2010). Teaching the world choice theory. Retrieved April 10, 2010, from www.wglasser.com

- Kim-Cohen, J., Moffitt, T., Caspi, A., & Taylor, A. (2004). Genetic and environmental processes in young children's resilience and vulnerability to socioeconomic deprivation. *Child Development, 75*, 651-668.
- Losel, F., Bender, D., & Bliesener, T. (1992). Psychology and law: International perspectives. No.: ISBN 3-11-013725-9, 581.
- Lowrey-Webster, H.M., Barrett, P.M., & Dadds, M.R. (2001). A universal prevention trial of anxiety and depressive symptomatology of childhood: Preliminary data from an Australian study. *Behavior Change, 18*, 36-50.
- Luthar, S. S., & Zelazo, L. B. (2003). Research on resilience: An integrative review. In Luthar S. S. (ed): Resilience and vulnerability: Adoption in the context of childhood adversities. New York, Cambridge, 489-509.
- Martin, A. (2008). Motivation and engagement scale junior-school (MES-JS) test user manual. Lifelong Achievement Group.
- Martin, A. (2008). Enhancing student motivation and engagement: The effects of a multidimensional intervention. *Contemporary Educational Psychology, 33*, 239-269.
- Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist 56*, 227-238.
- Masten, A., Burt, K., Roisman, G., Obradovic, J., Long, J., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology, 16*, 1071-1094.

- Muris, P., Meesters, C., & Fijlen, P. (2003). The self-perception profile for children: further evidence for its factor structure, reliability and validity. *Personality and Individual Differences*, 35, 1791-1802.
- Myers, D. (2000). The funds, friends, and faith of happy people. *American Psychologist*, 55, 56-67.
- Neil, A., & Christensen, H. (2007). Australian school-based prevention and early intervention programs for anxiety and depression: a systematic review. *Medical Journal of Australia*, 186, 305.
- Norrish, J., & Vella-Broderick, D. (2009). Positive psychology and adolescents: Where are we now? Where to from here? *Australian Psychologist*, 44, 270-278.
- Passaro, P., Moon, M., Wiest, D., & Wong, E. (2004). A model for school psychology practice: Addressing the needs of students with emotional and behavioral challenges through the use of an in-school support room and reality therapy. *Adolescence*, 39, 503-518.
- Reis, H. (1994). Domains of experience: Investigating relationship processes from three perspectives. *Theoretical Frameworks for Personal Relationships*, 87-110.
- Reynolds, S., Girling, E., Coker, S., & Eastwood, L. (2006). The effect of mental health problems on childrens ability to descriminate amongst thoughts, feelings and behaviors. *Cognitive Theory and Research* 30, 599-607.
- Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

- Sawyer, M., Arney, F., Baghurst, P., Clark, J., Graetz, B., Kosky, R., et al., (2001). The mental health of young people in Australia: Key findings from the child and adolescent component on the national survey of mental health and well-being. *Australian and New Zealand Journal of Psychiatry*, 35, 806-814.
- Sawyer, M.G.A.F., Baghurst, P.A., Clark, J.J., et al., (2000). *The mental health of young people in Australia*. Canberra: Mental health and special programs branch, Commonwealth Department of Health and Aged Care.
- Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shochet, I., Dadds, M., Holland, D., Whitefield, K., Harnett, P., & Osgarby, S. (2001). The efficacy of a universal school-based program to prevent adolescent depression. *Journal of Clinical Child & Adolescent Psychology*, 30, 303-315.
- Shochet, I., Holland, D., & Whitefield, K. (1997). Resourceful adolescent program: Group leader's manual. Brisbane, Queensland University of Technology.
- Silverman, W., & Hinshaw, S. (2008). The second special issue on evidence-based psychosocial treatments for children and adolescents: A 10-year update. *Journal of Clinical Child & Adolescent Psychology*, 37, 1-7.
- Silverman, W., Pina, A., & Viswesvaran, C. (2008). Evidence-based psychosocial treatment for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, 37, 34-64.
- Suldo, S., Shaunessy, E., & Hardesty, R. (2008). Relationship among stress, coping and mental health in high achieving high school students. *Psychology in the Schools*, 45, 273-290.

Sweeney, C., Gaffney, B., Martin, A., & Taaffe, M. (2006). *In the driving seat:*

Responsible behaviour - the key to happy relationships. Ireland: WGII.

Taaffe, M., & Scott, J. (2009, Oct). *In the driving seat*: Conference paper, William Glasser Institute of Australia bi-annual national conference, Melbourne, Australia 2009.

Terjesen, M., Jacofsky, M., Froh, J., & DiGiuseppe, R. (2004). Integrating positive psychology into schools: Implications for practice. *Psychology in the Schools*, 41, 163-172.

Wubbolding, R. (2000). *Reality therapy for the 21st century*: Brunner-Routledge.

Appendix A

Choice Theory Concepts

1. Internal Motivation

Choice Theory teaches that all anyone or anything outside of us can do is give us information. Even bells, buzzers, lights and whistles are information. It's your choice to heed them or not (Glasser, 1998).

2. Motivated to meet Five Basic Genetic Needs:

- a) Survival: Health, self-preservation, security and safety, risk-taking;
- b) Love and Belonging: The need for friends, acquaintances, intimacy, altruism; collaborating, sharing and co-operating;
- c) Power and achievement: skills, competence, recognition and respect; sense of pride and self-worth;
- d) Freedom: independence and autonomy;
- e) Fun: activities that are enjoyable, exciting and creative.

3. The Quality World: Wants

People have specific personal quality world pictures in their 'mental picture album' (Glasser, 1985) of people, activities, treasured possessions, events, beliefs or situations which they consider need –fulfilling. They believe that having these wants met and satisfied will enable them to have a happy life. For example we all have our own very

personal and specific beliefs about people who fulfill our need for love and belonging (Wubbolding, 2000).

Glasser (1998) defines the quality world as:

“This small personal world, which each person starts to create in his or her memory shortly after birth and continues to create and re-create through out life. It is made up of a small group of specific pictures that portray, [...] the best way to satisfy one or more of our basic needs. [...] for each of us this world is our personal Shangri-la, the place where we would feel very good right now if we could move move to it. Anytime we are able to succeed in satisfying a picture from this world, it is enjoyable; anytime we fail, it is always painful.”

Glasser, 1998, p. 44-45

4) Total Behavior

According to Glasser, it is through our behavioral choices that we attempt to meet our basic needs and thereby attempt to have some control over the world in which we live. Four inseperable but distinct components make up the total behavior: Acting, Thinking, Feeling and Physiology. Glasser employs the analogy of a front- wheel drive car to explain total behavior. The two front wheels are “Acting” and “Thinking”, whereas the back wheels are “feeling” and “Physiology”. We can only directly choose our actions and thoughts, however, they are inseperable from the feelings and physiology that go with them (Wubbolding, 2000, p. 47).

Appendix B

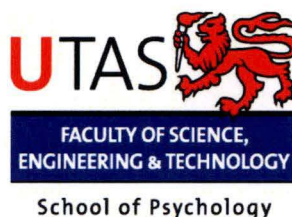
Choice Theory Axioms

The Ten Axioms of Choice Theory are:

1. The only person whose behavior we can control is our own.
2. All we can give another person is information
3. All long-lasting psychological problems are relationship problems.
4. The problem relationship is always part of our present life.
5. What happened in the past has everything to do with what we are today, but we can only satisfy our basic needs right now and plan to continue satisfying them in the future.
6. We can only satisfy our needs by satisfying the pictures in our 'quality world'
7. All we do is behave.
8. All behavior is total behavior and is made up of four components; acting, thinking, feeling and physiology.
9. All total behavior is chosen, but we only have direct control over the acting and thinking components. We can only control our feeling and physiology indirectly through how we choose to act and think.
10. All Total Behavior is designated by verbs and named by the part that is the most recognizable. (www.wglasser.com – accessed April 10th, 2010)

Appendix C

Information sheets (Parent/Teacher/Principal)



Information Sheet (Parent/Guardian)

“Looking at the best ways to Increase Psychologically Protective Factors in Primary School Aged Children.

You, and your child who is in 5th or 6th grade at Lenah Valley primary school, are invited to take part in a project that looks at the best way to assist children in their development of life coping skills.

What does the study involve? What will my child and I be asked to do?

Your child will be randomly allocated to one of two group programs. Both programs involve 16 bi-weekly sessions, delivered in group format over an eight week period. Each session is 40 minutes in duration and delivered by a Masters Level clinical psychology student (Ms Mercedes Taaffe). Both programs look at helping children to develop skills helpful for coping in life. One program involves the children learning about social skills; the other program involves the children learning about other types of life coping skills, such as good communication skills.

Children will be asked to fill a questionnaire booklet at the beginning of the research, and again nine weeks later, after completion of the program. The questionnaire booklets take 45 minutes to complete. At each of the assessment points, parents will also be asked to fill out a questionnaire that asks them to report their observations of their child's general coping abilities. This will take 15 minutes to complete.

Are there any risks from taking part?

There are no known risks associated with taking part in this research. If in the unlikely event your child becomes uncomfortable in any way they are free to withdraw at any time without explanation. The researcher has worked with young people for over twenty years and is well equipped to offer any support should it be required.

Is my child's participation confidential?

All information collected will be kept strictly confidential. All forms will be coded with a number in a way known only to the researchers. All information will only be available to the investigators listed on this form and stored in lockable cabinets within the School of Psychology at the University for at least five years after publication. Once the data is no longer required it will be destroyed. If the study is published, no information will be reported that would identify any individual participant. Information will only be reported in terms of group results.

Voluntary participation and withdrawal

You and your child's participation is entirely voluntary. You have the right to withdraw at any stage without having to explain your reasons and without any negative effect on your relationship with the researchers or Lenah Valley primary school.

How can I access a copy of the results of the study?

A summary of the findings of the study can be made available to you, by contacting the researchers at the details listed below.

Ethical Approval

This research project has been given ethical approval by the Human Research Ethics Committee (Tas) Network

(Reference No: H10291). If you have any concerns, questions or complaints with regard to the ethical conduct of this research, please contact the Executive Officer of the Human Research Ethics (Tasmania) Network, on 6226 7479 or human.ethics@utas.edu.au.

Contact Persons

This study is being undertaken by Mercedes Taaffe as part of the requirements for a Masters of Clinical Psychology (MSc). She is supervised by Dr Jennifer Scott (senior Lecturer) and Dr Raimondo Bruno (lecturer), in the School of Psychology. If you have any further questions please contact either Mercedes Taaffe (e-mail: metaaffe@utas.edu.au, phone: 0411533004), Dr Jennifer Scott (jenn.scott@utas.edu.au, 62262245) or Dr Raimondo Bruno (Raimondo.Bruno@utas.edu.au, 6226 2240).

We thank you for your interest in this study and hope you are willing to take part.

Dr Jenn Scott Dr Raimondo Bruno Mercedes Taaffe, MSc candidate).



Information Sheet (Teachers/Principal)

“Looking at the best ways to Increase Psychologically Protective Factors in Primary School Aged Children.

You, and your students who are in 5th or 6th grade at Lenah Valley primary school, are invited to take part in a project that looks at the best way to assist children in their development of life coping skills.

What does the study involve? What will my students and I be asked to do?

Your class will be randomly allocated to one of two group programs, a control group and an intervention group. Both programs involve 16 bi-weekly sessions, delivered in group format over an eight week period. Each session is 40 minutes in duration and delivered by a Masters Level clinical psychology student (Ms Mercedes Taaffe). The intervention group “In the Driving Seat” program looks at teaching participants that behaving in a responsible way to meet their needs will lead to greater happiness in life. The intervention also teaches a stress and coping model (Glasser 1990) that explains links between thoughts, feelings and behaviours and explains that by changing what we think and do, we can change how we feel, both emotionally and physically. The control group students will participate in a variety of classroom based activities ranging from art classes to group discussions on hobbies, movies etc. The control group will be given the

opportunity to take part in the “In the Driving Seat” program after completion of the study.

Teachers will be asked to fill a questionnaire at the beginning of the research, and again nine weeks later, after completion of the program. The questionnaire booklets take about 45 minutes to complete. Teachers/principal will be asked to forward consent and information forms to parents and students before the commencement of the research and help to distribute and collect the student questionnaire booklets pre and post research.

Are there any risks from taking part?

There are no risks to the teacher/principal in participating in this program.

Is my participation confidential?

All information collected will be kept strictly confidential. All forms will be coded with a number in a way known only to the researchers. All information will only be available to the investigators listed on this form and stored in lockable cabinets within the School of Psychology at the University for at least five years after publication. Once the data is no longer required it will be destroyed. If the study is published, no information will be reported that would identify any individual participant. Information will only be reported in terms of group results. Lenah Valley school has sent out the information and consent forms to parents/guardians and researchers have not had access to children's contact information.

Voluntary participation and withdrawal

You and your students' participation is entirely voluntary. You have the right to withdraw at any stage without having to explain your reasons and without any negative effect on your relationship with the researchers or Lenah Valley primary school.

How can I access a copy of the results of the study?

A summary of the findings of the study can be made available to you, by contacting the researchers at the details listed below.

Ethical Approval

This research project has been given ethical approval by the Human Research Ethics Committee (Tas) Network (Reference No:H10291)). If you have any concerns, questions or complaints with regard to the ethical conduct of this research, please contact the Executive Officer of the Human Research Ethics (Tasmania) Network, on 6226 7479 or human.ethics@utas.edu.au.

Contact Persons

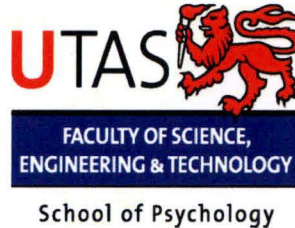
This study is being undertaken by Mercedes Taaffe as part of the requirements for a Masters of Clinical Psychology (MSc). She is supervised by Dr Jennifer Scott (senior Lecturer) and Dr Raimondo Bruno (lecturer), in the School of Psychology. If you have any further questions please contact either Mercedes Taaffe (e-mail: metaaffe@utas.edu.au, phone: 0411533004), Dr Jennifer Scott (jenn.scott@utas.edu.au, 62262245) or Dr Raimondo Bruno (Raimondo.Bruno@utas.edu.au, 6226 2240).

We thank you for your interest in this study and hope you are willing to take part.

Dr Jenn Scott Dr Raimondo Bruno Mercedes Taaffe, (MSc candidate).

Appendix D

Consent Forms (Parent, Child & Teacher)



CONSENT FORM (Parents)

We have read and understood the 'Information Sheet' for this project.

The nature and possible effects of the study have been explained to us to our satisfaction by the research worker and our consent is given voluntarily.

We understand that the study involves our child/children

Filling out a questionnaire booklet twice (30 minutes to complete). They complete the booklet before commencing a group program, and again one week after the program is completed.

Being randomly allocated to participate with their class mates in one of two groups that will run twice a week for 8 weeks during school time at Lenah Valley primary school.

One group, the intervention group, involves talking about links between thoughts and feelings and how it affects behaviour and ability to cope in life.

In the other group, the control group, students will participate in a variety of classroom based activities ranging from art classes to group discussions on hobbies, movies etc.

If our child's class is randomly selected as the control group we would like our child to participate in the intervention program when the research is complete Yes ____No ____

We understand that the study also involves one of us answering a short questionnaire before and after the research is completed on our of our child's general coping abilities.

All the information obtained in the study will be used for research purposes only and no information that could identify us or our child/children will be published.

Information collected will be retained in a locked filing cabinet and destroyed 5 years after the publication of the study

We will be given a signed copy of this information sheet and consent form.

Any questions that we have asked have been answered to our satisfaction.

We agree that our children and ourselves will participate in this investigation and understand that we may withdraw at any time without prejudice.

Name of parent (1) _____

Signature _____

Name of parent (2) _____

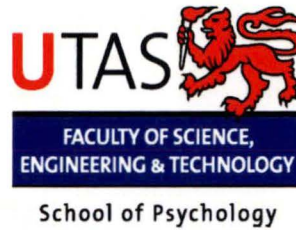
Signature _____

Investigator: I have explained this project and the implications of participation in it to these volunteers and I believe that the consent is informed and that they understand the implications of participation.

Date

Name of investigator

Signature of investigator



CONSENT FORM (Child)

I have read and understood the 'Information Sheet' for this project.

I understand what I am being asked to do and I give my permission to take part in this program.

I understand that I _____ will

Fill out a booklet that asks me different questions twice, once before I start the program and again one week after I have finished the program and that this will take me around 30 minutes each time.

Be in a class that will in one of two groups that will run twice a week for 8 weeks during school time at Lenah Valley primary school.

One group, the intervention group, involves talking about links between thoughts and feelings and how it affects behaviour and ability to cope in life.

In the other group, the control group, students will participate in a variety of classroom based activities ranging from art classes to group discussions on hobbies, movies etc.

Any questions that I have asked have been answered in a way that I understand.

I agree to take part in this program and I know that if I decide to leave it, I can without getting into any trouble.

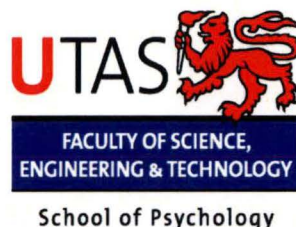
Name of student _____

Signature _____

Investigator: I have explained this project and the implications of participation in it to these volunteers and I believe that the consent is informed and that they understand the implications of participation.

Date _____ Name of investigator _____

Signature of investigator _____



CONSENT FORM (Teachers/principal)

We have read and understood the 'Information Sheet' for this project.

The nature and possible effects of the study have been explained to us to our satisfaction by the research worker and our consent is given voluntarily.

We understand that the study involves our student

Filling out a questionnaire booklet twice (30 minutes to complete). They complete the booklet before commencing a group program, and again one week after the program is completed.

Being randomly allocated to participate with their class mates in one of two groups that will run twice a week for 8 weeks during school time at Lenah Valley primary school.

One group, the intervention group, involves talking about links between thoughts and feelings and how it affects behaviour and ability to cope in life.

In the other group, the control group, students will participate in a variety of classroom based activities ranging from art classes to group discussions on hobbies, movies etc.

If our class is randomly selected as the control group we agree for our class to participate in the intervention program when the research is complete. Yes _____

No _____

We understand that the study also involves answering a short questionnaire before and after the research is completed rating our students behaviour.

All the information obtained in the study will be used for research purposes only and no information that could identify us or our students will be published.

Information collected will be retained in a locked filing cabinet and destroyed 5 years after the publication of the study

We will be given a signed copy of this information sheet and consent form.

Any questions that we have asked have been answered to our satisfaction.

We agree that our students and ourselves will participate in this investigation and understand that we may withdraw at any time without prejudice.

Name of teacher _____

Signature _____

Name of principal _____

Signature _____

Investigator: I have explained this project and the implications of participation in it to these volunteers and I believe that the consent is informed and that they understand the implications of participation.

Date _____ Name of investigator _____

Signature of investigator _____

Appendix E

(Quantitative Measures)

HARTER QUESTIONNAIRE

Administration and Instructions

The scale may be administered in groups as well as individually. After filling out the information at the top of the scale, children are instructed as to how to answer the questions, given below. We have found it best to read the items out-loud for 3rd and 4th graders, whereas for 5th graders and older, they can read the items for themselves, after you explain the sample item. Typically, we introduce the scale as a survey and, if time, ask the children to give examples of what a survey is. They usually generate examples involving two kinds of toothpaste, peanut butter, cereal, etc. to which you can respond that in a survey, there are no right or wrong answers, its just what you think, your opinion.

In explaining the question format, it is essential that you make it clear that for any given item they only check one box on either side of the sentence. They do not check both sides. (Invariably there will be one or two children who will check both sides initially and thus you will want to have someone monitor each child's sheet at the onset to make certain that they understand that they are only to check one box per item.)

INSTRUCTIONS TO THE CHILD:

We have some sentences here and, as you can see from the top of your sheet where it says "What I am like," we are interested in what each of you is like, what kind of person you are like. This is a survey, not a test. There are no right or wrong answers. Since kids are very different from one another, each of you will be putting down something different.

First let me explain how these questions work. There is a sample question at the top marked, (a). I'll read it aloud and you follow along with me. (Examiner reads sample question.) This question talks about two kinds of kids, and we want to know which kids are most like you.

So, what I want you to decide first is whether you are more like the kids on the left side who would rather play outdoors, or whether you are more like the kids on the right side who would rather watch T.V. Don't mark anything yet, but first decide which kind of kid is most like you, and go to that side of the sentence.

Now, the second thing I want you to think about, now that you have decided which kinds of kids are most like you, is to decide whether that is only sort of true for you, or really true for you. If it's only sort of true, then put an X in the box under sort of true; if it's really true for you, then put an X in that box, under really true.

For each sentence you only check one box. Sometimes it will be on one side of the page, another time it will be on the other side of the page, but you can only check one box for each sentence. You don't check both sides, just the one side most like you.

OK, that one was just for practice. Now we have some more sentences which I'm going to read out loud. For each one, just check one box, the one that goes with what is true for you, what you are most like.

Questionnaire

Coding S = Sample sentence
 A = Really true for me
 B = Sort of true for me

Name _____

Age _____

Birthday _____

Group

Are you a boy _____ or are you a girl _____

What I am Like

	A	B				A	B
S	<input type="checkbox"/>	<input type="checkbox"/>	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch tv	<input type="checkbox"/>	<input type="checkbox"/>
1	<input type="checkbox"/>	<input type="checkbox"/>	Some kids feel that they are very good at their school work	BUT	Other kids worry about whether they can do the school work assigned to them	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	Some kids find it hard to make friends	BUT	Other kids find it's pretty easy to make friends	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	Some kids do very well at all kinds of sports	BUT	Other kids don't feel that they are very good when it comes to sports	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are happy with the way they look	BUT	Other kids are not happy with the way they look	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	Some kids often do not like the way they behave	BUT	Other kids usually like the way they behave	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are often unhappy with themselves	BUT	Other kids are pretty pleased with themselves	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	Some kids feel like they are just as smart as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	Some kids have a lot of friends	BUT	Other kids don't have very many friends	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	Some kids wish they could be a lot better at sports	BUT	Other kids feel they are good enough at sports	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are happy with their height and weight	BUT	Other kids wish their height or weight were different	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	Some kids usually do the	BUT	Other kids often don't do	<input type="checkbox"/>	<input type="checkbox"/>

			right thing		the right thing		
12	<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't like the way they are leading their life	BUT	Other kids do like the way they are leading their life	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work quickly	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	<input type="checkbox"/>	Some kids would like to have a lot more friends	BUT	Other kids have as many friends as they want	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	Some kids think they could do well at just about any new sports activity they haven't tried before	BUT	Other kids are afraid they might not do well at sports they haven't ever tried	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	<input type="checkbox"/>	Some kids wish their body was different	BUT	Other kids like their body the way it is	<input type="checkbox"/>	<input type="checkbox"/>
17	<input type="checkbox"/>	<input type="checkbox"/>	Some kids usually act the way they know they are supposed to	BUT	Other kids often don't act the way they are supposed to	<input type="checkbox"/>	<input type="checkbox"/>
18	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are happy with themselves as a person	BUT	Other kids are often not happy with themselves	<input type="checkbox"/>	<input type="checkbox"/>
19	<input type="checkbox"/>	<input type="checkbox"/>	Some kids often forget what they learn	BUT	Other kids can remember things easily	<input type="checkbox"/>	<input type="checkbox"/>
20	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are always doing things with a lot of kids	BUT	Other kids usually do things by themselves	<input type="checkbox"/>	<input type="checkbox"/>
21	<input type="checkbox"/>	<input type="checkbox"/>	Some kids feel that they are better than others their age at sports	BUT	Other kids don't feel they can play as well	<input type="checkbox"/>	<input type="checkbox"/>
22	<input type="checkbox"/>	<input type="checkbox"/>	Some kids wish their physical appearance (how they look) was different	BUT	Other kids like their physical appearance the way it is	<input type="checkbox"/>	<input type="checkbox"/>
23	<input type="checkbox"/>	<input type="checkbox"/>	Some kids usually get in trouble because of things they do	BUT	Other kids usually don't do things that get them in trouble	<input type="checkbox"/>	<input type="checkbox"/>
24	<input type="checkbox"/>	<input type="checkbox"/>	Some kids like the kind of	BUT	Other kids often wish they	<input type="checkbox"/>	<input type="checkbox"/>

			person they are		were someone else		
25	<input type="checkbox"/>	<input type="checkbox"/>	Some kids do very well at their classwork	BUT	Other kids don't do very well at their classwork	<input type="checkbox"/>	<input type="checkbox"/>
26	<input type="checkbox"/>	<input type="checkbox"/>	Some people wish that more people their age liked them	BUT	Other kids feel that most people their age do like them	<input type="checkbox"/>	<input type="checkbox"/>
27	<input type="checkbox"/>	<input type="checkbox"/>	In games and sports some kids usually watch instead of play	BUT	other kids usually play rather than just watch	<input type="checkbox"/>	<input type="checkbox"/>
28	<input type="checkbox"/>	<input type="checkbox"/>	Some kids wish something about their face or hair looked different	BUT	Other kids like their face and hair the way they are	<input type="checkbox"/>	<input type="checkbox"/>
29	<input type="checkbox"/>	<input type="checkbox"/>	Some kids do things they know they shouldn't do	BUT	Other kids hardly ever do things they know they shouldn't do	<input type="checkbox"/>	<input type="checkbox"/>
30	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are very happy being the way they are	BUT	Other kids wish they were different	<input type="checkbox"/>	<input type="checkbox"/>
31	<input type="checkbox"/>	<input type="checkbox"/>	Some kids have trouble figuring out the answer in school	BUT	Other kids almost always can figure out the answers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are popular with others their age	BUT	Other kids are not very popular	<input type="checkbox"/>	<input type="checkbox"/>
33	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Some kids don't do well at new outdoor games	BUT	Other kids are good at new games right away	<input type="checkbox"/>	<input type="checkbox"/>
34	<input type="checkbox"/>	<input type="checkbox"/>	Some kids think that they are good looking	BUT	Other kids think that they are not very good looking	<input type="checkbox"/>	<input type="checkbox"/>
35	<input type="checkbox"/>	<input type="checkbox"/>	Some kids behave themselves very well	BUT	Other kids often find it hard to behave themselves	<input type="checkbox"/>	<input type="checkbox"/>
36	<input type="checkbox"/>	<input type="checkbox"/>	Some kids are not very happy with the way they do a lot of things	BUT	Other kids think the way they do things is fine	<input type="checkbox"/>	<input type="checkbox"/>

TEACHER'S RATING SCALE OF CHILD'S ACTUAL BEHAVIOUR

Coding A = Really true B = Sort of true

Childs Name _____ Class/grade/group _____

Rater _____

For each child please indicate what you feel to be his or her actual competence on each question, in your opinion. First decide what kind of child he or she is like, the one described on the left or the right, and then indicate whether this is just sort of true or really true for that individual. Thus for each item check one of four boxes.

	A	B				A	B
1	<input type="checkbox"/>	<input type="checkbox"/>	This child is really good at his/her school work	BUT	This child can't do the school work assigned	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	This child finds it hard to make friends	BUT	For this child it's pretty easy	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	This child does really well at all kinds of sports	BUT	This child isn't very good when it comes to sports	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	This child is good-looking	BUT	This child is not very good-looking	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	This child is usually well-behaved	BUT	This child is often not well-behaved	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	This child often forgets what he/she learns	BUT	This child can remember things easily	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	This child has lots of friends	BUT	This child doesn't have many friends	<input type="checkbox"/>	<input type="checkbox"/>

8	<input type="checkbox"/>	<input type="checkbox"/>	This child is better than others his/her age at sports	BUT	This child can't play as well	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	This child has a nice physical appearance	BUT	This child doesn't have such a nice physical appearance	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	This child usually acts appropriately	BUT	This child would be better if he/she acted differently	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	This child has trouble figuring out the answers in school	BUT	This child almost always can figure out the answers	<input type="checkbox"/>	<input type="checkbox"/>
12	<input type="checkbox"/>	<input type="checkbox"/>	This child is popular with others his/her age	BUT	This child is not very popular	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	<input type="checkbox"/>	This child doesn't do well at new outdoor games	BUT	This child is not very popular	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	<input type="checkbox"/>	This child isn't very good-looking	BUT	This child is pretty good-looking	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	This child often gets in trouble because of things he/she does	BUT	This child usually doesn't do things that get him/her in trouble	<input type="checkbox"/>	<input type="checkbox"/>

Motivation and Engagement Scale

The Motivation and Engagement is copyrighted. It is available to purchase from the website below.

www.lifelongachievement.com

Coping Strategy Indicator (Revised Version)

Are you a:

☐ Girl ☐ Boy

How old are you? _____

What grade are you in? _____

How many people live with you? _____

What is your Ethnicity? _____

Try to think of a problem that you had in the last six months or so. This should be a problem that was important to you, and that caused you to worry

Please describe the problem in a few words:

Think about this one problem as you answer the next pages. To answer the questions, please check the box that best describes what you did. Answer each question even though they may sound similar.

Did you remember to write down your problem? If not, please do so before going on. Thanks.

(For each question answer either; A lot, A little or Not at all)

Keeping the bad event in mind, tell us how much you...

1. Told a friend your problem? A lot ☐ A little ☐ Not at all
☐

2. Tried to change something to help fix the problem?
☐ A lot ☐ A little ☐ Not at all
3. Thought of every different thing that you could possibly do before you decided what to do?
☐ A lot ☐ A little ☐ Not at all
4. Tried to do other things so that you wouldn't have to think about the problem?
☐ A lot ☐ A little ☐ Not at all
5. Accepted sympathy and understanding from someone?
☐ A lot ☐ A little ☐ Not at all
6. Did everything you could to hide how bad you felt about your problem?
☐ A lot ☐ A little ☐ Not at all
7. Talked to someone about the problem, because talking about it made you feel better?
at all ☐ A lot ☐ A little ☐ Not
8. Set some goals for yourself to deal with the problem?
☐ A lot ☐ A little ☐ Not at all
9. Carefully thought about your choices?
☐ A lot ☐ A little ☐ Not at all
10. Daydreamed and wished things were like they used to be?
☐ A lot ☐ A little ☐ Not at all
11. Tried different ways to solve the problem until you found one that worked?
at all ☐ A lot ☐ A little ☐ Not
12. Told a friend or relative about what you were afraid of or what you worried about?
at all ☐ A lot ☐ A little ☐ Not

13. Spent more time alone than you usually do? ☐ A lot ☐ A little ☐ Not at all
14. Told someone about the problem, because talking to them helped you to come up with ways to fix the problem? ☐ A lot ☐ A little ☐ Not at all
15. Thought about what you needed to do to fix the problem? ☐ A lot ☐ A little ☐ Not at all
16. Gave your full attention to solving the problem? ☐ A lot ☐ A little ☐ Not at all
17. Formed a plan in your mind of how you are going to fix the problem? ☐ A lot ☐ A little ☐ Not at all
18. Watched more TV than you usually do? ☐ A lot ☐ A little ☐ Not at all
19. Went to someone like a friend, teacher, or counselor to help you feel better? ☐ A lot ☐ A little ☐ Not at all
20. Stood firm and fought for what you wanted? ☐ A lot ☐ A little ☐ Not at all
21. Avoided being with other people? ☐ A lot ☐ A little ☐ Not at all
22. Did things that you like such as hobbies or sports, to not think about the problem? ☐ A lot ☐ A little ☐ Not at all
23. Went to a friend to feel better about the problem? ☐ A lot ☐ A little ☐ Not at all
24. Went to a friend for advice on how to fix the problem? ☐ A lot ☐ A little ☐ Not at all
25. Accepted sympathy or understanding from a friend who had the same problem? ☐ A lot ☐ A little ☐ Not at all
26. Slept more than usual? ☐ A lot ☐ A little ☐ Not at all

27. Imagined about how things could be different?
☐ A lot ☐ A little ☐ Not at all
28. Imagined you were like the hero in a book or movie?
at all ☐ A lot ☐ A little ☐ Not
29. Tried to solve the problem?
☐ A lot ☐ A little ☐ Not at all
30. Wished that people would just leave you alone?
☐ A lot ☐ A little ☐ Not at all
31. Let a friend or a relative help you?
☐ A lot ☐ A little ☐ Not at all
32. Looked for comfort from those people who know you best?
☐ A lot ☐ A little ☐ Not at all
33. Tried to form a plan about what you were going to do, instead of acting without
thinking?
at all ☐ A lot ☐ A little ☐ Not

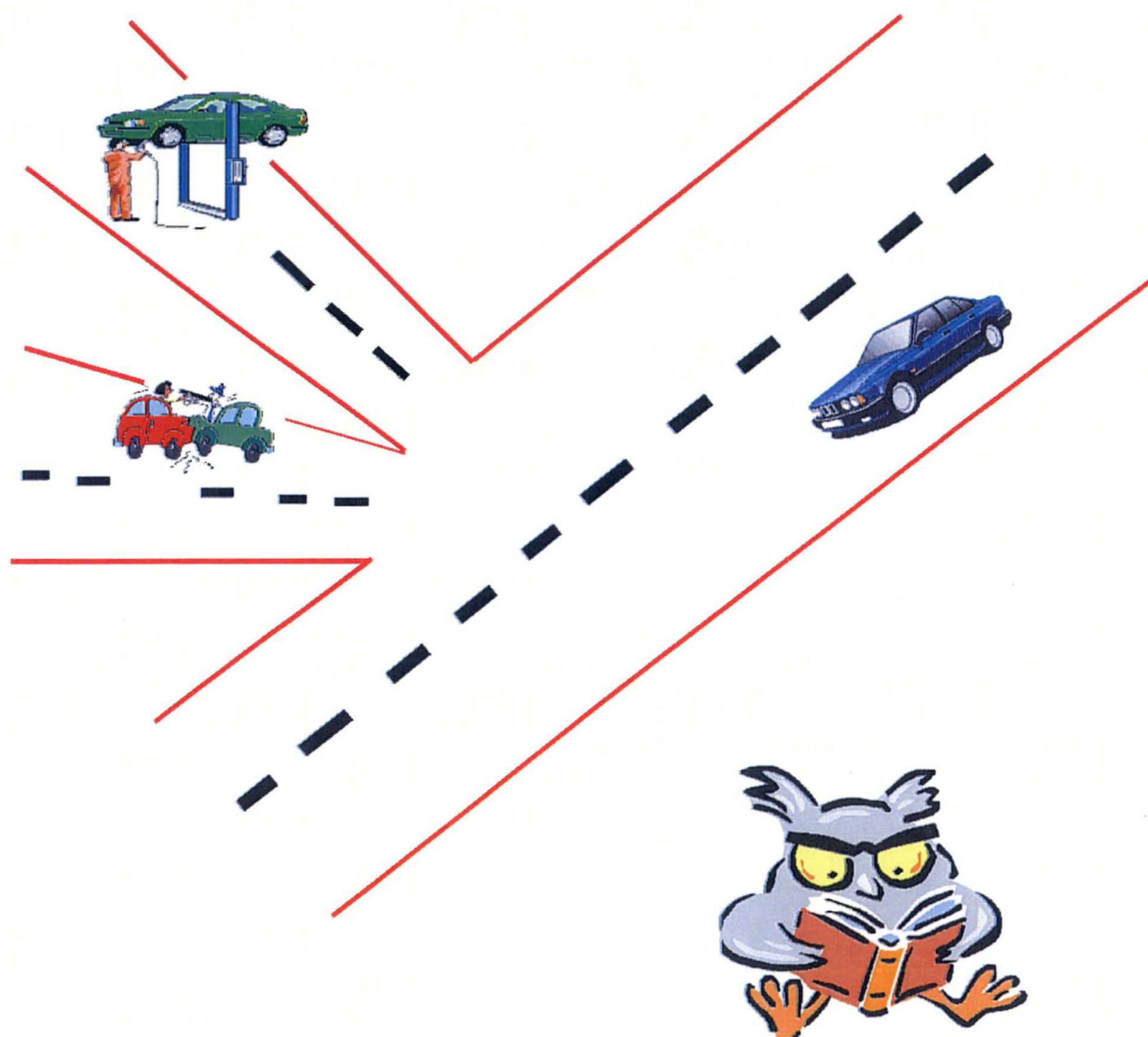
Appendix F

Participants Qualitative Evaluation Questionnaire

1. What part of the program worked best for you?
2. How and why was the program helpful to you?
3. How would you describe this program to someone who has never done it?
4. Is there anything in this program you would change?
5. What have you learned about making choices?
6. What caring habits worked best for you?

Appendix G

IN THE DRIVING SEAT



Responsible Behaviour
■ The Key to Happy Relationships